

EXHIBIT A

SALTZ, MONGELUZZI, BARRETT & BENDESKY, P.C.

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THOMAS GORCZYNSKI,	:	Index No. _____
<i>Individually, and on behalf of all others similarly situated,</i>	:	
Plaintiff,	:	
v.	:	
ELECTROLUX HOME PRODUCTS, INC., SUPER K CORPORATION d/b/a ABC DISCOUNT APPLIANCES, MIDEA AMERICA CORP., AND MIDEA MICROWAVE AND ELECTRICAL APPLIANCES MANUFACTURING CO., LTD., AND ABC CORPS. 1-10,	:	
Defendants.	:	

CLASS ACTION COMPLAINT

1. INTRODUCTION

1. This is a Complaint brought by Plaintiff Thomas Gorczynski, and those New Jersey consumers who are similarly situated, to redress a concealed defective condition present in the stainless steel handles of Over-The-Range Microwave Ovens (“Microwave(s)”) designed, manufactured, marketed, distributed and sold by the following Defendants: Electrolux Home Products, Inc. (“Electrolux”), Super K Corporation d/b/a ABC Discount Appliances (“ABC Discount Appliances”), Midea America Corp. (“Midea USA”); Midea Microwave and Electrical Appliances Manufacturing Co., Ltd. (“Midea China”); and ABC CORPS. 1-10.

2. The Microwaves are designed for installation on a vertical wall directly above the cooking surface of the range,¹ but when the cooking surface below is in operation the Microwave's stainless steel handle heats to excessive temperatures rendering the handle unfit for use with a bare hand and exposing anyone who touches it to a substantial risk of permanent and/or serious injury ("Handle Defect").

3. A photograph of Plaintiff's Microwave is depicted below:



FIGURE 1
PLAINTIFF GORCZYNSKI'S INSTALLED MICROWAVE WITH HANDLE DEFECT

4. The American Society of Testing Materials ("ASTM") publishes the Standard Guide for Heated System Surface Conditions that Produce Contact Burn Injuries, known as

¹ See Installation Instructions, attached hereto as Exhibit A at Figure 1.

ASTM Standard C1055-03 (Reapproved 2014) (hereinafter “Standard” or “ASTM C1055-03”).²

This Standard defines the human burn hazard for skin contact “to standardize the determination of acceptable surface operating conditions for heated systems.” Ex. B, § 5.2.

5. The Standard warns against skin contact with any metal that exceeds 44°C or 111°F, and acknowledges the risk rises exponentially with each degree increase over 44°C. Ex. B, §§ 6.4.2, X1.2.3.3. This is because a temperature of 111°F represents a standard pain threshold with maximum bearable pain beginning at 133°F, and the beginning of numbness and possible irreversible injury is at 140°F. Ex. B, Figure X1.2.

6. The Standard is clear, however, that “[i]f the surface temperature exceeds 70°C [158°F] and the surface is metallic, it may present a hazard regardless of the contact duration. Attempts should be made to lower the surface temperature below 70°C.” Ex. B, § 6.4.2.

7. This Handle Defect is unreasonably dangerous and renders the Microwaves’ handles unfit to use when opening the Microwave door – its intended and ordinary purpose. As a result of the hollow handle construction comprised of thin walls of stainless steel, the stainless steel handles with the Handle Defect heat to temperatures in excess of those permitted under ASTM Standard C1055-03 (Reapproved 2014).

8. As a result of this Handle Defect and Defendants’ conduct, Plaintiff brings claims for: (i) violations of New Jersey’s Consumer Fraud Act, N.J.S.A § 56:8-2, *et seq.*; (ii) violations of the Magnuson-Moss Consumer Products Warranties Act, 15 U.S.C. § 2301, *et seq.* (“MMWA”); (iii) breach of implied warranty of merchantability; and (iv) unjust enrichment. Plaintiff brings suit on behalf of all other similarly situated persons, as set forth below, who have purchased the Microwaves.

² See ASTM C1055-03 (Reapproved 2014), attached hereto as Ex. B.

II. PARTIES

PLAINTIFF THOMAS GORCZYNSKI

9. Plaintiff Thomas Gorczynski is an adult individual consumer who is a citizen and resident of Cherry Hill, New Jersey.

10. Plaintiff Gorczynski is the owner of a Frigidaire Gallery Over-The-Range Microwave Oven, Model No. FGMV154CLFA, which contains the Handle Defect.

11. Plaintiff Thomas Gorczynski purchased his Microwave from Defendant ABC Discount Appliances in Pennsauken, New Jersey in May 2015.

12. Plaintiff Gorczynski's Microwave was properly installed pursuant to Defendant Electrolux's installation instructions.

13. Plaintiff Gorczynski's Microwave handle reaches excessive surface temperatures when the range below is in operation rendering the handle unreasonably dangerous and unfit to use when opening the Microwave door – its intended and ordinary purpose.

DEFENDANT ELECTROLUX HOME PRODUCTS, INC.

14. Defendant Electrolux is, upon information and belief, a Delaware corporation that can be served with process at its principal place of business located at 10200 David Taylor Dr., Charlotte, NC 28262.

15. Electrolux distributes its products under a variety of brand names, including Electrolux, Electrolux ICON, Frigidaire Professional, Frigidaire Gallery, Frigidaire, Eureka, Kelvinator, Sanitaire, Tappan, and White-Westinghouse. *See* <http://www.electroluxappliances.com/About-Electrolux/About-US/> (last visited March 13, 2018).

16. Upon information and belief, at all times relevant, Electrolux was engaged in the business of distributing the Microwaves throughout the United States, including in the State of

New Jersey.

DEFENDANT ABC DISCOUNT APPLIANCES

17. Defendant ABC Discount Appliances is a New Jersey corporation that can be served with process at its principal place of business located at 6013 Mansion Blvd., Pennsauken, NJ 08109.

18. Defendant ABC Discount Appliances sells kitchen appliances at its store in Pennsauken, New Jersey, as well as advertises for the sale of the Microwaves online.

19. Defendant ABC Discount Appliances sold Plaintiff Gorczynski his Microwave with the Handle Defect.

20. Prior to March 2018, Defendant ABC Discount Appliances sold Microwave model FGMV154CLF online. *See, e.g.*,

<https://www.abcdiscountappliance.com/products/Frigidaire/frig/fgmv154clf.html> (Frigidaire Gallery Over the Range Microwave Model No. FGMV154CLF) (last visited on March 13, 2018). On this webpage, Defendant ABC Discount Appliances sold Microwaves and advertised “details” for the Microwaves including the fact that the Microwave is an “Over-The-Range Microwave with Convection” with features including “Smudge-Proof™ Stainless Steel [that] Resists fingerprints and cleans easily.” *See id.*

21. At some time since March 13, 2018, Defendant ABC Discount Appliances has removed Microwave model FGMV154CLF from its webpage. This was subsequent to pre-suit notice from Plaintiff Gorczynski sent to Defendant ABC Discount Appliances on January 8, 2018.

22. Upon information and belief, at all times relevant, Defendant ABC Discount Appliances was engaged in the business of selling the Microwaves in Camden County, and throughout the State of New Jersey.

DEFENDANT MIDEA AMERICA CORP.

23. Midea America Corp. (“Midea USA”) is a corporation organized and existing under the laws of the state of Florida, with a principal place of business of 5 Sylvan Way, Parsippany, NJ 07054, and is a citizen of the states of Florida and New Jersey. In April 2017, Midea America Corp. opened its Research and Development facility in Louisville, Kentucky. This \$10 million facility “features offices, labs and test kitchens....” <https://www.empire-equipment.com/single-post/2017/11/03/Inside-Look-at-Midea-RD-Center-Louisville-KY> (last visited on March 18, 2018); *see also* <https://www.bizjournals.com/louisville/news/2017/03/13/louisville-center-is-part-of-a-north-american.html> (last visited March 18, 2018) (“Louisville center is part of a North American expansion,” and according to Midea America Corp. President Jim Tomaszewski, “[o]ur physical expansion in North America is a testament to the continued business growth in this important market.... Not only will these facilities give us the resources and tools we need to meet the fast-growing demand for high-quality products for the home in the U.S. and Canada”). According to its U.S. website:

Established in 2003, Midea America Corporation (MAC) is the North American headquarters of Midea, the world’s leading manufacturer of air conditioners and home appliances. Midea America headquarters its sales and marketing offices in Parsippany, NJ, and US Research & Development in Louisville, KY. The Midea Customer Care Center is located in Miami, FL, and Canadian Operations are run out of Toronto, Canada. Midea America markets and distributes air conditioning, home appliance, and floor care products for Midea owned brands, licensed brands and manufacturing customers throughout North America, with over \$500M revenue and 60 employees. The Midea America Research Center (MARC) was established in early 2015 to provide as a technology leadership for Midea America in developing home appliance products for the US market. MARC provides platform engineering for US appliance products, manages technical testing and development, oversees Midea’s growing US patent portfolio, and acts as a Center of Technical Excellence for Midea worldwide.

<https://us.midea.com/us/press-release-midea-america-breaks-ground> (last visited on May 7,

2018). Midea America Corp. has sold, or currently sells, microwaves with “stainless steel finish” in the United States. *See* <http://www.provantage.com/midea-america-em925anqp2~7MIDE037.htm> (identifying Medea America Corp. as “Manufacturer”) (last visited on March 13, 2018); <http://www.electronicexpress.com/catalog/74640/BlackDecker-EM925ANQP2> (selling microwave with “stainless steel finish”) (last visited on March 13, 2018).

**DEFENDANT MIDEA MICROWAVE AND ELECTRICAL APPLIANCES
MANUFACTURING CO., LTD**

24. Defendant Midea Microwave and Electrical Appliances Manufacturing Co., Ltd. (“Midea China”) is a company incorporated under the laws of China with a registered address at No 18 Huanzhen West Road, ShunDe Beijiao, FoShan, Guangdong, 528311, China. Pursuant to a Finished Product Purchase Agreement between Midea China and Electrolux, Midea China manufactured and supplied several models of Microwaves with Stainless Steel Handles for distribution into the United States, including but not limited to Plaintiff Gorczynski’s Microwave. These Microwaves with Stainless Steel Handles were shipped from Midea China in China to the United States for distribution to U.S. consumers, including those in Camden County, New Jersey and throughout New Jersey. *See, e.g.*, exemplar bills of lading for Microwave Model No. FGMV154CLF, made by Midea China, available at <https://www.tradeatlas.com/p7firm/US/electrolux-major-appliance-na/eyJhMSI6IkTX0NPREUiLCJkMSI6Ijg1MTY1MCIsInMxIjoxMjkzODMyODAwLCJmMSI6MTMyNTM2ODc5OX0=?page=6> (last visited on March 13, 2018).

DEFENDANTS ABC CORP. 1-10

25. The Microwaves sold in New Jersey since 2012 were distributed by Electrolux and sold to members of the proposed Class by Defendant ABC Discount Appliances and others in Electrolux’s retail network identified herein as ABC Corps. 1-10.

III. JURISDICTION AND VENUE

26. This Court has jurisdiction over Defendants because they conduct business in New Jersey; have sufficient minimum contacts in New Jersey; and otherwise intentionally avail themselves of the markets within New Jersey through the promotion, sale, marketing and distribution of its products, such that the exercise of jurisdiction by this Court is proper and necessary.

27. Venue is proper pursuant to R. 4:3-2 as Plaintiff Gorczynski resides in Camden County, New Jersey; Defendants conduct substantial business in New Jersey, including in Camden County; and a substantial part of the events giving rise to Plaintiff Gorczynski's claims occurred in Camden County, New Jersey.

IV. FACTUAL ALLEGATIONS

A. The Microwave is Defective

28. For almost one-hundred years, Defendant Electrolux has designed, manufactured, assembled, sold, and otherwise placed into the stream of commerce a wide range of home appliances. Defendant Electrolux sells its Microwaves to consumers throughout the United States through authorized retailers, including but not limited to, the Defendant ABC Discount Appliances.

29. The Microwave is designed, manufactured, and intended to be used "over-the-range." *See, e.g.*, Ex. C (Specifications Sheet). The Microwave is to be installed directly over the cooking surface, as shown below:

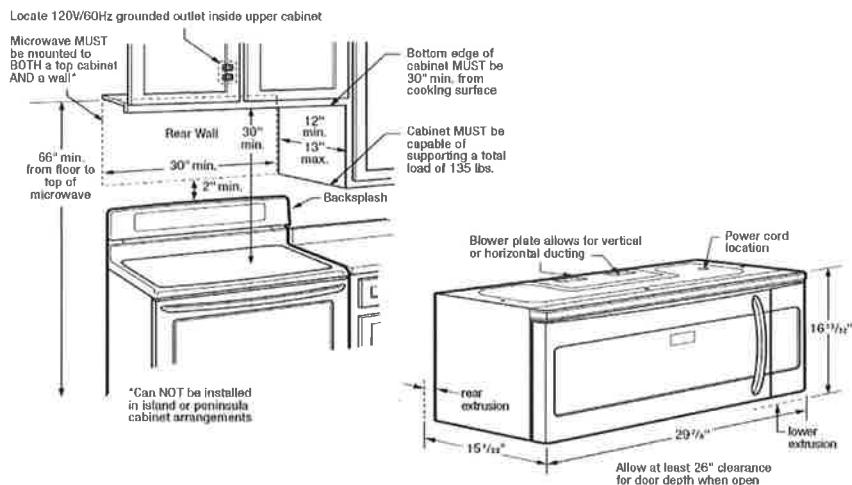


FIGURE 2
INSTALLATION SPECIFICATIONS

30. The Microwaves is an over-the-range microwave with a stainless steel handle. The Microwaves sold in New Jersey since 2013 were manufactured and tested by Midea China. Midea USA is believed to be the “North American headquarters of Midea, the world’s leading manufacturer of . . . home appliances,” with its Customer Care Center in Miami, Florida. The Midea America Research Center has the capability to perform testing on the Microwaves, and the stainless steel handles of those Microwaves, sold in the United States, including in New Jersey. The stainless steel handles of the Microwaves were manufactured by a separate, third-party foreign supplier. The Microwaves were distributed by Defendant Electrolux, and sold to members of the proposed Class by Defendant ABC Discount Appliances and others in Electrolux’s retail network identified herein as ABC Corps. 1-10.

31. Each handle part number above includes the Handle Defect as it is constructed from hollow tubes of razor thin stainless steel outer walls without any insulation to absorb heat emanating from the cooking surface below.

32. The Microwaves have been designed, manufactured, and intended to be used with a unique “Handle Design” manufactured from stainless steel. The Microwaves’ handles inflicted

with the Handle Defect are readily identifiable by part numbers, including, but not limited to, at least the following part numbers: 5304481502, 5304477401, 5304477399, 5304492615, 5304471830, 5304471828, 5304472054, and 5304472053. These part numbers are used across multiple Microwave models and are easily cross-referenced to the model of Microwave purchased by a consumer.

33. The outer stainless steel wall of the Microwaves' hollow tubular handle allows them to rapidly absorb heat from the cooktop below. All of these handles behave similarly due to the use of stainless steel with lack of material used for the wall and absence of any insulation resulting in the handle temperatures exceeding 130° F under the most favorable circumstances to going well in excess of 200° F under the worst case scenario. Neither is consistent with the governing standards.

34. At the time of filing of this Complaint, the retail cost of Plaintiff Gorczynski's stainless steel handle (Handle Part No. 5304481502) is approximately \$124.58, despite its cost to Midea China to be only a few dollars.

35. The intended use of the Microwave's stainless steel handle is to access the appliance for use, and is the only way to open the Microwave door. The stainless steel handle is designed for use with a bare hand, and a consumer's reasonable expectation is that the handle to the Microwave can be touched without risk of burning or other serious injury.

36. The Microwaves' stainless steel handles with the Handle Defect fail to conform to the governing standards in the United States for preventing consumers' exposure to burn injuries.

37. ASTM C1055-03 is a design guide for the determination of acceptable surface operating conditions to prevent contact with exposed heated surfaces. *See Ex. B, §1.1.* The Standard is designed to "establish the maximum operating surface temperature under the worst

case conditions.” Ex. B, §6.3.

38. The Standard describes thermal sensations and tissue effects of skin contact with metallic surfaces. A temperature of 111°F represents a pain threshold, painful to the touch, and maximum bearable pain begins at 133°F. This pain threshold is adopted by Underwriters Laboratories, Inc. (“UL”) 923 stating the temperature of a metal handle or knob cannot exceed 131°F. *See* UL 923, Section 42.3, Table 42.2. While Defendant Electrolux represents compliance with UL standards, no testing of the stainless steel handle of the Microwave was ever done by any Defendant to identify, address, or prevent the Handle Defect, despite the existence of the Midea America Research Center that “provide[s] . . . technology leadership for Midea America in developing home appliance products for the US market[,] [and] provides platform engineering for US appliance products, manages technical testing and development, . . . and acts as a Center of Technical Excellence for Midea worldwide.” <https://us.midea.com/us/press-release-midea-america-breaks-ground>

39. But the Standard is likewise clear that “[i]f the surface temperature exceeds 70°C [158°F] and the surface is metallic, it may present a hazard regardless of the contact duration. Attempts should be made to lower the surface temperature below 70°C.” Ex. B, § 6.4.2.

40. This Standard establishes a range of injury to skin that contacts metallic surfaces at identified temperatures:

Sensation	Skin Color	Tissue Temperature		Process	Injury
		°C	°F		
Numbness	White	68-72	154-162	Protein Coagulation	Irreversible
	Mottled Red & White	80-84	140 - 147		Possibly Reversible
Maximum Pain	Bright Red	52-56	126-133	Thermal inactivation of Tissue Contents	
Severe Pain		48	118		Reversible
Threshold Pain	Light Red	40-44	104-111	Normal metabolism	
Hot					
Warm	Flushed	38-40	97-104		None

FIGURE 3
ASTM C1055-03 (2014), FIG. X1.2 THERMAL SENSATIONS AND ASSOCIATED EFFECTS THROUGHOUT RANGE OF TEMPERATURES COMPATIBLE WITH TISSUE LIFE

41. When the cooking range is in use below the Microwave, however, these stainless steel handles reach temperatures that exceed all applicable standards because of the Handle Defect. This occurs because the handles are hollow and manufactured from walls of stainless steel that are too thin and lacking in any insulating feature to protect against the heat emanating from the range below.

42. Defendants have not provided any warnings, instructions, or visible indicators that the handle becomes hot with the operation of the cooking surface below making it unfit for its ordinary purpose, and may cause serious pain, burns or other injuries to a user thereby presenting a defective condition that is unreasonable to the user.

B. The Defective Microwave Caused Plaintiff's Injury

43. Plaintiff Gorczynski's Microwave was purchased in from Defendant ABC Discount Appliances in Pennsauken, New Jersey on May 16, 2015 for \$477.00, excluding tax.

44. Plaintiff Gorczynski would not have purchased or would have paid less for his Microwave if the Handle Defect known to Defendants had been disclosed.

45. Plaintiff Gorczynski understood that in making the sale, Defendant ABC Discount

Appliances was acting with the knowledge and approval of Defendant Electrolux and/or as the agent of Defendant Electrolux.

46. Defendant ABC Discount Appliances adopted and represented that Defendant Electrolux's representations that the Microwave could be used "Over-The-Range."

47. At the time of purchase, Plaintiff Gorczynski saw the representation that the Microwave was an "Over-The-Range" Microwave by Defendants Electrolux and Defendant Midea China (who created and affixed the packaging of the Microwave) and Defendant ABC Discount Appliances (the retailer that advertised, marketed, promoted, and sold the Microwaves). The "Description" of Plaintiff Gorczynski's Microwave on his receipt dated May 16, 2015 states that it is for an "OTR" Microwave.

48. Thereafter, Plaintiff Gorczynski's Microwave was installed over his cooking range, as depicted in the photograph above, in accordance with the Installation Instructions for the Microwave, which were provided by Defendant Electrolux. *See Ex. A. (Installation Instructions).*

49. Plaintiff Gorczynski has a conventional-size cooking range that is also sold by Electrolux under the same brand as his Microwave: Frigidaire Gallery.

50. While cooking on his stove, Plaintiff reached for the handle of his Microwave to open it.

51. As a result of Plaintiff's skin contact with the handle of his Microwave, he discovered the exceedingly high temperature of that handle.

52. Plaintiff Gorczynski sent pre-suit notice to Defendants before filing this Complaint.

C. Defendants Had Knowledge of and/or Recklessly Disregarded Knowledge of the Handle Defect

53. Based on the design or manufacture of the Microwave, the Handle Defect exists when using the Microwave for its intended purpose as instructed by the Use & Care Guides for the Microwaves.

54. The Handle Defect causes the handles of the Microwaves to reach temperatures exceeding all permissible objective standards in the United States that cause the handle to be unfit for its ordinary purpose, and may cause serious burns or other injuries to a user thereby presenting a defective condition that is unreasonable to the user.

55. According to the Quality Assurance Policy on Supplier Pre-Production Quality, Defendant Electrolux also requires its suppliers, such as Midea China, to identify “[t]he raw material used” “by a material analysis or certification” – which includes the stainless steel used to manufacture the Microwaves’ handles with the Handle Defect. *See* http://www.electroluxgroup.com/en/wp-content/uploads/sites/2/2010/06/EL29003_2007.pdf (last visited on April 2, 2018) at pp. 2, 11. Further, to the extent its suppliers were to outsource the manufacture of the handles, Electrolux requires them to keep records on the analysis of materials and parts obtained by any of the sub-suppliers to the Suppliers. *See id.* at p. 9.

56. Defendant Electrolux, Midea China, and/or Midea USA’s choice of stainless steel causes the exterior of the handle to reach temperatures that create a substantial risk of harm to consumers when the cooking range is in use below the Microwave. The identical design using a different material, such as aluminum, remains significantly cooler than stainless steel under identical conditions.

57. Defendants’ choice of stainless steel for the handle, rather than an alternative metal such as aluminum, combined with its hollow construction with thin walls rather than solid

construction, causes the exterior of the Microwave handle to reach temperatures that create a substantial risk of harm to consumers when the cooking range is in use below the Microwave under the applicable objective standards in the United States and New Jersey.

58. Defendants Electrolux, Midea China and Midea America had long known the stainless steel handles rose to dangerous temperatures.

59. To this date, no Defendant has taken any steps to remediate or notify consumers of this dangerous condition in the Microwaves despite actual knowledge of its existence for many years.

60. Defendants should have also had constructive knowledge of the Handle Defect since at least December 2013, before Plaintiff's purchase of his Microwave.

61. Plaintiff Gorczynski is informed, believes, and thereon alleges that Defendant Electrolux routinely denies warranty claims that putative Class Members submit. Therefore, notice to Defendant Electrolux has been, and is, futile in that Electrolux has deliberately and willfully refused to replace, modify or remanufacture the Microwaves to eliminate the dangerous Handle Defect.

62. Plaintiff Gorczynski is informed and believes that Defendants acknowledged internally that the Handle Defect caused injuries and burns to consumers.

63. Despite having repeated notice of the Handle Defect, its effects, and consumers' reasonable expectation of using the handle to open the Microwave door when the cooking range is in use, Defendants have engaged and continue to engage in the following wrongful course of conduct, where they:

- a. Design, manufacture, market, advertise, and sell the Microwave with a Handle Defect that causes burns and other injuries to consumers in New Jersey;
- b. Fail to disclose or warn against this unreasonable safety risk;
- c. Sell Microwaves with a Handle Defect that are not fit for the ordinary purpose for which the Over-The-Range Microwaves are used;
- d. Continue to represent expressly or by necessary implication that the Microwaves are fit to use in consumer's households when they know these statements are false because the Microwaves contain a Handle Defect;
- e. Continue to manufacture, market, advertise, distribute, and sell the Microwaves when they know that the Microwaves are defective and unsafe;
- f. Fail to disclose the risk that to a substantial certainty, the Microwave will cause burns or other injuries when used as instructed by its Use & Care Guide;
- g. Fail to disclose to consumers the Handle Defect; and
- h. Fail to implement a recall or repair program to adequately announce to Plaintiff and Class Members the existence of the Handle Defect, and provide, without charge, a solution to remedy and correct the Handle Defect.

64. Despite Defendants' knowledge that its Microwaves are defective, Defendants continue to sell the Microwaves omitting disclosure of the Handle Defect; have not modified the Microwaves to eliminate the Handle Defect; have not provided any warning of the Handle Defect; have not offered to replace all of the defective Microwaves; have not replaced or repaired the workmanship, parts, and/or material that cause the Handle Defect; and have not refunded all or part of the monies paid by Plaintiff and Class Members for their Microwaves,

including the cost to install the Microwaves.

65. Had Plaintiff Gorczynski known of the Handle Defect in the Microwave and the substantial risk of burns resulting from use of the Microwave due to the Handle Defect, Plaintiff would not have purchased the Microwave or would have paid less.

D. Breach of Implied Warranty

66. The Microwave's Use & Care Guide contains the "MAJOR APPLIANCE WARRANTY INFORMATION" on the final page. *See* Ex. D, attached hereto. All Microwave models include this same information on warranties.

67. The "MAJOR APPLIANCE WARRANTY INFORMATION" is printed overseas in Asia prior to shipping to the United States. The "MAJOR APPLIANCE WARRANTY INFORMATION" is "Printed in China" for Microwave models manufactured for Electrolux by Midea China. This document is sealed in the box at the point of manufacture in Thailand or China; imported into the United States; and distributed by Defendant Electrolux and purchased by Plaintiff and Class Members without the terms of this document ever being disclosed until the box is opened after purchase.

68. The express limited warranty ("Limited Warranty") Defendant Electrolux provides guarantees:

Your appliance is covered by a one year limited warranty. For one year from your original date of purchase, Electrolux will pay all costs for repairing or replacing any parts of this appliance that prove to be defective in materials or workmanship when such appliance is installed, used and maintained in accordance with the provided instructions.

See Ex. D, attached hereto.

69. The Warranty expressly provides that "Service under this warranty must be obtained by contacting Electrolux at the addresses or phone numbers below." *Id.* Warranty

service is not provided by the seller.

70. In the United States, the sole entity responsible for warranty service under the express warranty is Electrolux Major Appliances, North America in Augusta, Georgia at 1.800.944.9044, a division of Electrolux Home Products, Inc. *See id.*

71. The Microwave is not free from defects in material and workmanship.

72. The “MAJOR APPLIANCE WARRANTY INFORMATION” includes a section with language seeking to exclude or modify implied warranties of merchantability and fitness for a particular purpose, titled: “DISCLAIMER OF IMPLIED WARRANTIES; LIMITATIONS OF REMEDIES”. *Id.*

73. The language of the “DISCLAIMER OF IMPLIED WARRANTIES; LIMITATIONS OF REMEDIES” is not available to buyers prior to purchase. There is no disclaimer of any implied warranty visible at the point of sale, as it only appears on the last page of the Use & Care Guide sealed within the Microwaves’ box. *See Ex. D at (unnumbered final page).*

74. The “DISCLAIMER OF IMPLIED WARRANTIES; LIMITATIONS OF REMEDIES” is not conspicuous.

75. The “DISCLAIMER OF IMPLIED WARRANTIES; LIMITATIONS OF REMEDIES” is not separately acknowledged by Plaintiff or any Class Member.

76. No warranty information, or any disclaimer or limitation of any warranty, was printed or displayed on the exterior of the boxes containing the Microwaves.

77. The Microwaves are not merchantable as consumer goods sold in the United States, including New Jersey.

78. Plaintiff Gorczynski is informed, believes, and thereon alleges that the Handle

Defect exists in every Microwave when it left Defendants' control.

79. Defendant ABC Discount Appliances sells other models of microwaves with handles that do not heat to unreasonably dangerous levels. The Microwave fails to match the quality of similar products sold by Defendant ABC Discount Appliances, and Plaintiff and other consumers in New Jersey suffered injuries resulting from the Handle Defect when using the Microwave in the intended and reasonable manner.

80. To the extent there is any notice requirement imposed by law, Plaintiff gave notice to Defendant ABC Discount Appliances on January 8, 2018, prior filing this lawsuit.

81. As part of the sale of each Microwave, Defendant ABC Discount Appliances warranted, marketed, and advertised that the defective Microwaves were of merchantable quality and fit for the ordinary purpose for which over-the-range Microwaves are used.

82. Defendant ABC Discount Appliances fell short of its warranty obligations because it failed to remedy and eliminate the Handle Defect in the Microwave that causes burns, or create a substantial risk of burns.

83. Despite Defendants' knowledge that its Microwaves are defective, Defendants continue to sell the Microwaves omitting disclosure of the Handle Defect; have not modified the Microwaves to eliminate the Handle Defect; have not provided any warning of the Handle Defect; have not offered to replace all of the defective Microwaves; have not replaced or repaired the workmanship, parts, and/or material that cause the Handle Defect; and have not refunded all or part of the monies paid by Plaintiff and Class Members for their Microwaves, including the cost to install the Microwaves.

V. CLASS ACTION ALLEGATIONS

84. This action is brought by Plaintiff as a class action pursuant to New Jersey Court

R. 4:32 and for all claims asserted herein, on behalf of themselves and the following, initially defined, Class:

All persons in the State of New Jersey who purchased a Microwave with a stainless steel handle since May 10, 2012 and continuing to the date the Microwaves were no longer offered for sale or a class is certified. Excluded from the Class are officers, representatives, or agents of Defendants, as well as the judge presiding over this case and his or her immediate family members.

Numerosity

85. Numerosity – *R. 4:32-1(a)(1)*. Although the exact number of Class Members is uncertain, and can only be ascertained through appropriate discovery, including discovery of Defendant Electrolux's and Defendant ABC Discount Appliances' sales records, the Class is so numerous that the joinder of all members is impracticable. The Class is comprised of an easily ascertainable, self-identifying set of persons who purchased the Microwaves with the Handle Defect.

86. Commonality – *R. 4:32-1(a)(2); (b)(3)*. There are questions of law and fact common to the Class, which predominate over any questions affecting only individual Class members. These common questions of law and fact include, without limitation:

- a. Whether Defendants engaged in the conduct as alleged herein;
- b. Whether the Microwaves at issue in this lawsuit are defective;
- c. Whether Defendants knew or should have known of the inherent Handle Defect in the Microwave;
- d. Whether Defendants represented that its Microwaves were of a particular standard, quality, or grade when they were not and/or when Defendants knew or should have known that they were of another standard, quality, or grade;
- e. Whether Defendants fraudulently concealed from and/or failed to disclose to Plaintiff and the Class the inherent problems with its Microwave;
- f. Whether Defendants had a duty to Plaintiff and the Class to disclose the inherent Handle Defects in its Microwave;

- g. Whether the facts Defendants misrepresented, concealed, or failed to disclose were material;
- h. Whether as a result of Defendants' concealment of and/or failure to disclose material facts, Plaintiff and the Class acted to their detriment by purchasing the Microwave;
- i. Whether Defendants should be declared financially responsible for notifying all Class Members of the problems with its Microwave and for the cost and expense of repairing and replacing all such Microwaves or replacing its defective stainless steel handle;
- j. Whether the Microwave is covered by implied warranty of merchantability; and
- k. Whether Plaintiff and the Class Members are entitled to damages, and the amount of such damages.

87. Typicality – *R. 4:32-1(a)(3)*. Plaintiff's claims are typical of the claims of the Class Members in that Plaintiff, like all Class Members, owns a defective Microwave, and has been damaged by Defendants' uniform misconduct.

88. Furthermore, the factual bases of Defendants' misconduct are common to all Class Members and represent a common thread of misconduct resulting in injury to all members of the Class. The Handle Defect is a uniform defect in the design and/or material selection of the stainless steel handles of the Microwaves.

89. Adequacy of Representation – *R. 4:32-1(a)(4)*. Plaintiff will fairly and adequately protect the interests of the Class. Plaintiff has retained counsel who are experienced in consumer class-action litigation. Plaintiff has no interests which are adverse to, or in conflict with, other members of the Class.

90. Superiority of Class Action – *R. 4:32-1(b)(3)*. A class action is superior to other available methods for the fair and efficient adjudication of the controversy. Class treatment of common questions of law and fact is superior to multiple individual actions or piecemeal

litigation. Moreover, absent a class action, most Class Members would likely find the cost of litigating their claims prohibitively high and would therefore have no effective remedy at law.

91. The prosecution of separate actions by the individual Class Members would create a risk of inconsistent or varying adjudications with respect to individual Class Members, which would establish incompatible standards of conduct for Defendants. In contrast, a class action presents far fewer management difficulties, conserves judicial as well as the parties' resources, and protects the rights of each Class Member.

VI. CAUSES OF ACTION

FIRST CAUSE OF ACTION

New Jersey Consumer Fraud Act, N.J.S.A. § 56:8-2 [Against All Defendants]

92. Plaintiff hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint.

93. Plaintiff and other members of the Class are "consumers" within the meaning of the New Jersey Consumer Fraud Act ("CFA").

94. The Microwaves are "merchandise" within the meaning of the CFA, as they are goods that are offered directly or indirectly to the public for sale.

95. At all relevant times, Defendants conducted trade and commerce in New Jersey and elsewhere within the meaning of the CFA.

96. The CFA is, by its terms, a cumulative remedy, such that remedies under its provisions can be awarded in addition to those provided under other remedies.

97. Defendants have engaged in deceptive, unconscionable, unlawful, unfair, fraudulent and misleading commercial practices, including misleading omissions of material fact, in connection with the marketing, promotion, and sale of Microwaves with the Handle Defect.

98. Defendants knew of the Handle Defect and did not disclose it to consumers like

Plaintiff Gorczynski, and did not provide any warning of the Handle Defect to protect consumers like Plaintiff.

99. Defendants had knowledge of the Handle Defect at the time of sale. The Handle Defect is latent and is not something that Plaintiff or Class members could, in the exercise of reasonable diligence, have discovered independently prior to purchase.

100. Defendant Electrolux facilitates the misleading nature of its knowing omission by communicating the purported benefits of the Microwave knowing them to be false exposing consumers to the serious risk of injury related to the use of the Microwave when the range below is in use, with the intent that consumers like Plaintiff and members of the Class rely upon the omissions and misrepresentations and use the Microwave in connection with the range underneath. According to the Installation Instructions, Use & Care Guide, and Specification Sheet for the Microwave, Defendant Electrolux promoted the Microwave as an “Over The Range Microwave Oven.” Ex. A at p. 1, Ex. D (Use & Care Guide) at p. 10, Ex. C (Specification Sheet) at p. 1. However, as a result of the Handle Defect, the stainless steel handle of the Microwaves could not be safely contacted with a bare hand when the range below is in use.

101. Defendant Midea China knew of the Handle Defect, yet deceptively and falsely printed the Installation Instructions, Use & Care Guide, and Specification Sheet for the Microwave representing the Microwave as an “Over The Range Microwave Oven” and also deceptively and falsely packaged and labeled the Microwave as an “Over The Range Microwave Oven” never disclosing the Handle Defect.

102. Defendant Midea USA, with its North American headquarters in the United States, along with research centers and customer service centers in the United States, failed to test the Microwaves or their stainless steel handles despite actual and/or constructive knowledge

that they possessed the Handle Defect. In doing so, Midea USA deceptively and falsely made misleading misrepresentations or committed omissions of material fact in connection with the marketing, promotion, and sale of the Microwaves with the Handle Defect.

103. Defendant ABC Discount Appliances advertised and sold the Microwaves as “Over-The-Range” despite constructive knowledge of the defect since December 2013, prior to the purchase of Plaintiff Gorczynski’s Microwave.

104. Defendants intended that consumers like Plaintiff and members of the Class rely on its deceptive, false and misleading misrepresentations or omissions of material fact in order to increase its sales and profit of the Microwaves.

105. Defendants’ conduct was objectively deceptive and had the capacity to deceive reasonable consumers under the circumstances. It was a material fact that a reasonable and/or unsophisticated consumer who would attach importance at the time of purchase that the Handle Defect of the Microwave’s stainless steel handle, which is the only way to open the Microwave door, prevents contact with a bare hand without risk of burning or other serious injury. This fact would influence a reasonable consumer’s choice of action during the purchase of his/her Microwave.

106. Defendants intended that Plaintiff and the other members of the Class rely on its acts of concealment and omissions by purchasing the Microwaves at full price rather than paying less for them or purchasing competitors’ over-the-range microwaves.

107. Had Defendants disclosed all material information regarding the Handle Defect to Plaintiff Gorczynski and other members of the Class, they would not have purchased the Microwaves, or they would have paid less for them.

108. Defendants’ conduct had an impact on the public interest because the acts were

part of a generalized course of conduct affecting numerous consumers.

109. As a result of the foregoing acts, omissions, and practices, Plaintiff Gorczynski and other members of the Class have suffered an ascertainable loss by purchasing defective Microwaves that are unable to perform their essential function for their expected useful life and present a risk of safety to Plaintiff and members of the Class, including the substantial risk of burns resulting from use of the Microwave. Plaintiff Gorczynski is entitled to recover such damages, together with appropriate penalties, including treble damages, attorneys' fees, and costs of suit.

SECOND CAUSE OF ACTION
Violation of Magnuson-Moss Consumer Products Warranties Act,
15 U.S.C. § 2301, *et seq.* ("MMWA")
[Against Defendants Electrolux, Midea China, ABC Discount Appliances]

110. Plaintiff Gorczynski hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint.

111. The MMWA provides a private right of action by purchasers of consumer products against retailers who, *inter alia*, fail to comply with the terms of an implied or written warranty. 15 U.S.C. § 2310(d)(1). As alleged herein, Defendants have failed to comply with its implied warranty of merchantability with regard to the Microwaves.

112. Microwaves are consumer products, as that term is defined in 15 U.S.C. § 2301(1).

113. Plaintiff Gorczynski and each member of the Class are consumers, as that term is defined in 15 U.S.C. § 2301(3).

114. Defendants Electrolux, Midea China, ABC Discount Appliances are suppliers and warrantors, as those terms are defined in 15 U.S.C. § 2301(4)-(5).

115. The MMWA provides a cause of action for breach of warranty or other violations

of the Act. 15 U.S.C. § 2310(d)(1). Defendants Electrolux, Midea China, ABC Discount Appliances have breached the implied warranty of merchantability for the Microwaves, as alleged herein, which they cannot disclaim under the MMWA, 15 U.S.C. § 2308(a)(1), by failing to provide merchantable goods. Plaintiff has suffered damages as a result of Defendants' breach of the implied warranty of merchantability as set forth herein. 15 U.S.C. § 2310(d)(1)-(2).

116. Notice of the breach of warranty claims raised herein was provided to Defendants, who were afforded a reasonable opportunity to cure. Defendants never cured. Until Plaintiff's representative capacity is determined, notice and opportunity to cure through Plaintiff, and on behalf of the Class, can be provided under 15 U.S.C. § 2310(e).

117. Defendants' acts and omissions in violation of the MMWA are “[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce,” and they are unlawful. 15 U.S.C. § 2310(b); 15 U.S.C. § 45(a)(1).

118. Plaintiff Gorczynski and the Class Members have suffered, and are entitled to recover, damages as a result of Defendants Electrolux, Midea China, and ABC Discount Appliances' breach of implied warranty of merchantability and violations of the MMWA.

119. Plaintiff also seeks an award of costs and expenses, including attorneys' fees, under the MMWA to prevailing consumers in connection with the commencement and prosecution of this action. 15 U.S.C. § 2310(d)(2). Plaintiff and the prospective Class intend to seek such an award, including expert witness costs and other recoverable costs, as prevailing consumers at the conclusion of this lawsuit.

THIRD CAUSE OF ACTION
Breach of Implied Warranty of Merchantability
[Against Defendants Electrolux, Midea China, ABC Discount Appliances]

120. Plaintiff hereby incorporates by reference the allegations contained in the

preceding paragraphs of this Complaint.

121. Defendant Midea China manufactured the Microwaves, and shipped them to the United States for sale to Plaintiff and the Class Members.

122. Defendant Electrolux distributed the Microwaves to retailers in New Jersey, including Defendant ABC Discount Appliances, for sale to consumers in New Jersey such as Plaintiff Gorczynski.

123. Defendants Electrolux, Midea China, ABC Discount Appliances impliedly warranted to Plaintiff and members of the Class that the Microwaves were free of defects, and were merchantable and fit for their ordinary purpose for which such goods are used.

124. As alleged herein, Defendants Electrolux, Midea China, ABC Discount Appliances breached the implied warranty of merchantability because the Microwaves uniformly possess the unsafe Handle Defect or defects. The Microwaves are therefore defective, unmerchantable, and unfit for their ordinary, intended purpose.

125. Reasonable and adequate notice was provided to Defendants Electrolux, Midea China, ABC Discount Appliances that the Microwaves were defective, unmerchantable, and unfit for their intended use or purpose. Defendants failed to cure.

126. Plaintiff did not receive or otherwise have the opportunity to review, at or before the time of sale, the written warranty containing the purported exclusions and limitations of remedies. Accordingly, any such exclusions and limitations of remedies are unconscionable and unenforceable, and Plaintiff is entitled to all remedies available under Article 2 of the New Jersey Uniform Commercial Code. Any purported warranty disclaimers, exclusions, and limitations were unconscionable and unenforceable.

127. As a direct and proximate result of the breach of implied warranty of

merchantability, Plaintiff and members of the Class have been injured in an amount to be proven at trial, including replacement of the defective handle with a non-defective handle of at least the quality and grade marketed and promised, as well as shipment and installation of the replacement handle.

FOURTH CAUSE OF ACTION
Unjust Enrichment
[Against Defendant ABC Discount Appliances]

128. Plaintiff hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint.

129. Defendant ABC Discount Appliances received monies for the purchases of Plaintiff's and Class Members' Microwaves, and Defendant ABC Discount Appliances was enriched at the expense of Plaintiff and Class Members.

130. As a result of the Handle Defect, it is unjust to permit Defendant ABC Discount Appliances to retain the full value of the Microwaves.

131. As a result of Defendant ABC Discount Appliances' unjust enrichment, Plaintiff and the Class Members are entitled to restitution and/or the institution of a constructive trust disgorging all profits, benefits, and other compensation obtained by Defendant ABC Discount Appliances, in addition to attorneys' fees, costs, and interest thereon.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Gorczynski, individually and on behalf of all others similarly situated, requests a judgment against Defendants, as follows:

- A. For an order certifying the Class, appointing Plaintiff as representative of the Class, and designating the undersigned as Class Counsel;
- B. For compensatory and/or statutory damages sustained by Plaintiff and the Class;
- C. For treble damages where available by law;

- D. For payment of costs of suit herein incurred;
- E. For both pre-judgment and post-judgment interest on any amounts awarded;
- F. For payment of reasonable attorneys' fees, expert fees, and expenses, as may be allowable under applicable law; and
- G. For such other and further relief as the Court may deem just and proper.

CERTIFICATION PURSUANT TO R. 4:5-1

I certify that the matter in controversy regarding the New Jersey state law claims brought by Plaintiff Gorczynski, on behalf of himself and on behalf of the members of the New Jersey Class pled herein pursuant to R. 4:32-1(b)(3), are not the subject of any other action pending in any court or of a pending arbitration proceeding, and that no other such action or arbitration proceeding regarding those New Jersey state law claims is contemplated.

DESIGNATION OF TRIAL COUNSEL

In accordance with *R. 4:5-1*, Simon Bahne Paris, Esquire is hereby designated as trial counsel.

CERTIFICATION OF COMPLIANCE WITH RULE 1:38-7(c)

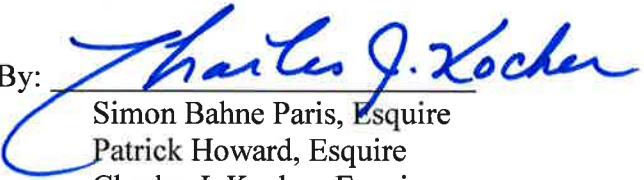
I certify that confidential personal identifiers have been redacted from documents now submitted to the Court, and will be redacted from all documents submitted in the future in accordance with Rule 1:38-7(b).

JURY TRIAL DEMAND

Pursuant to New Jersey Court *R. 4:35-1*, Plaintiff Gorczynski hereby demands a trial by jury for all issues so triable.

Respectfully submitted,
**SALTZ, MONGELUZZI, BARRETT &
BENDESKY, P.C.**

Dated: May 10, 2018

By: 

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Attorneys for Plaintiff and Proposed Class

EXHIBIT A

Installation Instructions

Over the Range Microwave Oven

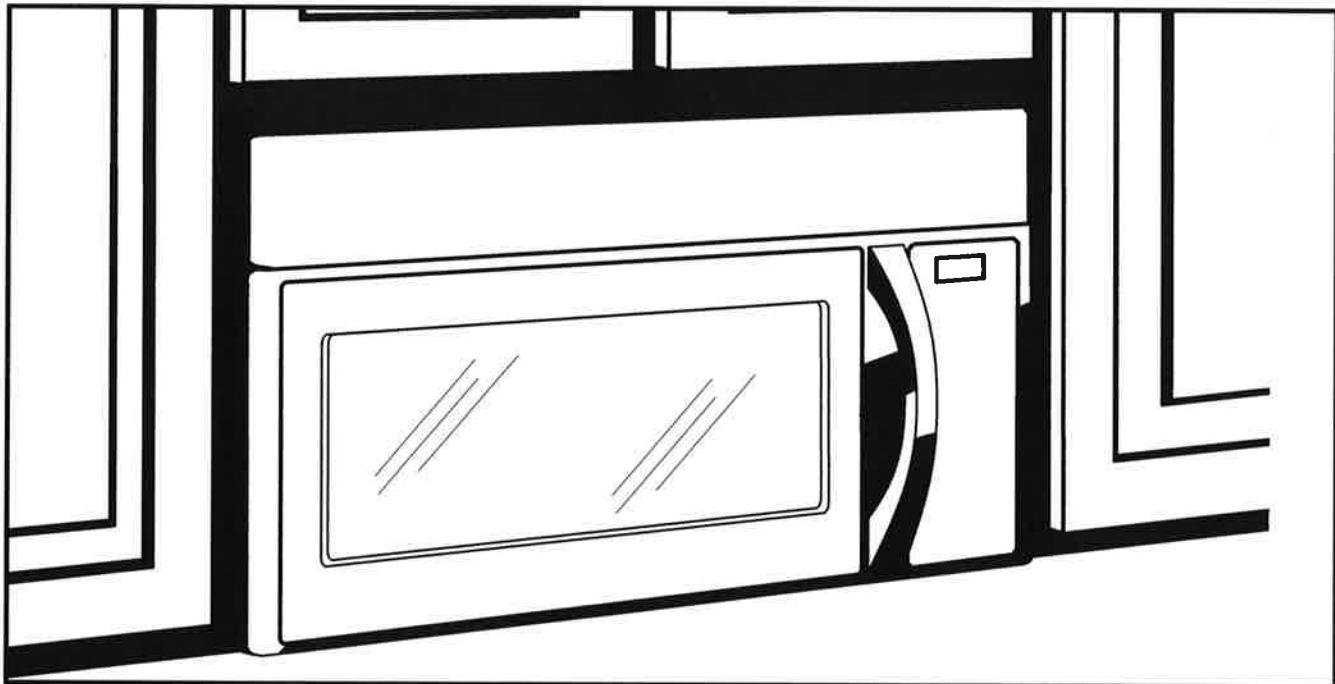
Questions? Call 1-800-944-9044(US) or 1-800-265-8352(Canada)

BEFORE YOU BEGIN

Read these instructions completely and carefully.

- **IMPORTANT** – Save these instructions for local inspector's use.
- **IMPORTANT** – Observe all governing codes and ordinances.
- **Note to Installer** – Be sure to leave these instructions with the Consumer.

- **Note to Consumer** – Keep these instructions for future reference.
- Skill level – Installation of this appliance requires basic mechanical and electrical skills.
- Proper installation is the responsibility of the installer.
- Product failure due to improper installation is not covered under the Warranty.



**READ CAREFULLY.
KEEP THESE INSTRUCTIONS.**

p/n 316495162
April 2017

Installation Instructions

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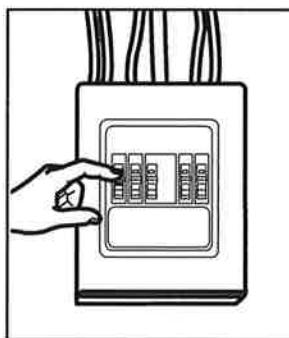
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Installation Instructions

IMPORTANT SAFETY INSTRUCTIONS

This product requires a three-prong grounded outlet. The installer must perform a ground continuity check on the power outlet box before beginning the installation to ensure that the outlet box is properly grounded. If not properly grounded, or if the outlet box does not meet electrical requirements noted (under ELECTRICAL REQUIREMENTS), a qualified electrician should be employed to correct any deficiencies.



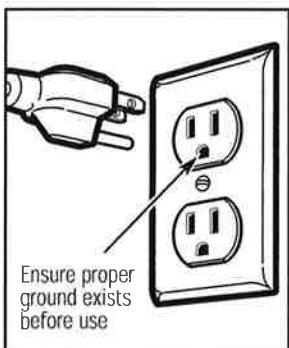
CAUTION: For personal safety, remove house fuse or open circuit breaker before beginning installation to avoid severe or fatal shock injury.

CAUTION: For personal safety, the mounting surface must be capable of supporting the cabinet load, in addition to the added weight of this 63-85 pound (28.5-38.5 kg) product, plus additional oven loads of up to 50 pounds (22.7 kg) or a total weight of 113-135 pounds (51.3-61.2 kg).

CAUTION: For personal safety, this product cannot be installed in cabinet arrangements such as an island or a peninsula. It must be mounted to **BOTH** a top cabinet AND a wall.

NOTE: For easier installation and personal safety, it is recommended that two people install this product.

IMPORTANT – PLEASE READ CAREFULLY. FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED TO AVOID SEVERE OR FATAL SHOCK.



The power cord of this appliance is equipped with a three-prong (grounding) plug which mates with a standard three-prong (grounding) wall receptacle to minimize the possibility of electric shock hazard from this appliance.

You should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

Where a standard two-prong wall receptacle is encountered, it is very important to have it replaced with a properly grounded three-prong wall receptacle, installed by a qualified electrician.

DO NOT, UNDER ANY CIRCUMSTANCES, CUT, DEFORM OR REMOVE ANY OF THE PRONGS FROM THE POWER CORD. DO NOT USE WITH AN EXTENSION CORD.

ELECTRICAL REQUIREMENTS

Product rating is 120 volts AC, 60 Hertz, 15 amps and 1.6 kilowatts. This product must be connected to a separate and dedicated supply circuit of the proper voltage and frequency. Wire size must conform to the requirements of the National Electrical Code or the prevailing local code for this kilowatt rating. The power supply cord and plug should be brought to a separate and dedicated 15- to 20- ampere branch circuit single grounded outlet. The outlet box should be located in the cabinet above the microwave oven. The outlet box and supply circuit should be installed by a qualified electrician and conform to the National Electrical Code or the prevailing local code.

Installation Instructions

DAMAGE—SHIPMENT/INSTALLATION

- If the unit is damaged in shipment, return the unit to the store in which it was bought for repair or replacement.
- If the unit is damaged by the customer, repair or replacement is the responsibility of the customer.
- If the unit is damaged by the installer (if other than the customer), repair or replacement must be made by arrangement between customer and installer.

PARTS INCLUDED

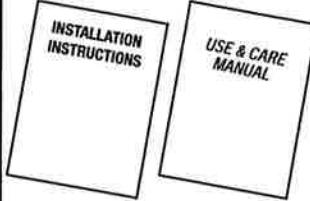
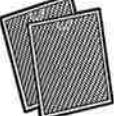
HARDWARE PACKET

PART	QUANTITY
	Wood Screws (1/4" x 2")
	Toggle Bolts (and wing nuts) (3/16" x 3")
	Self-Aligning Machine Screws (1/4"-28 x 3 1/4")
	Nylon Grommet (for metal cabinets)

You will find the installation hardware contained in a packet with the unit. Check to make sure you have all these parts.

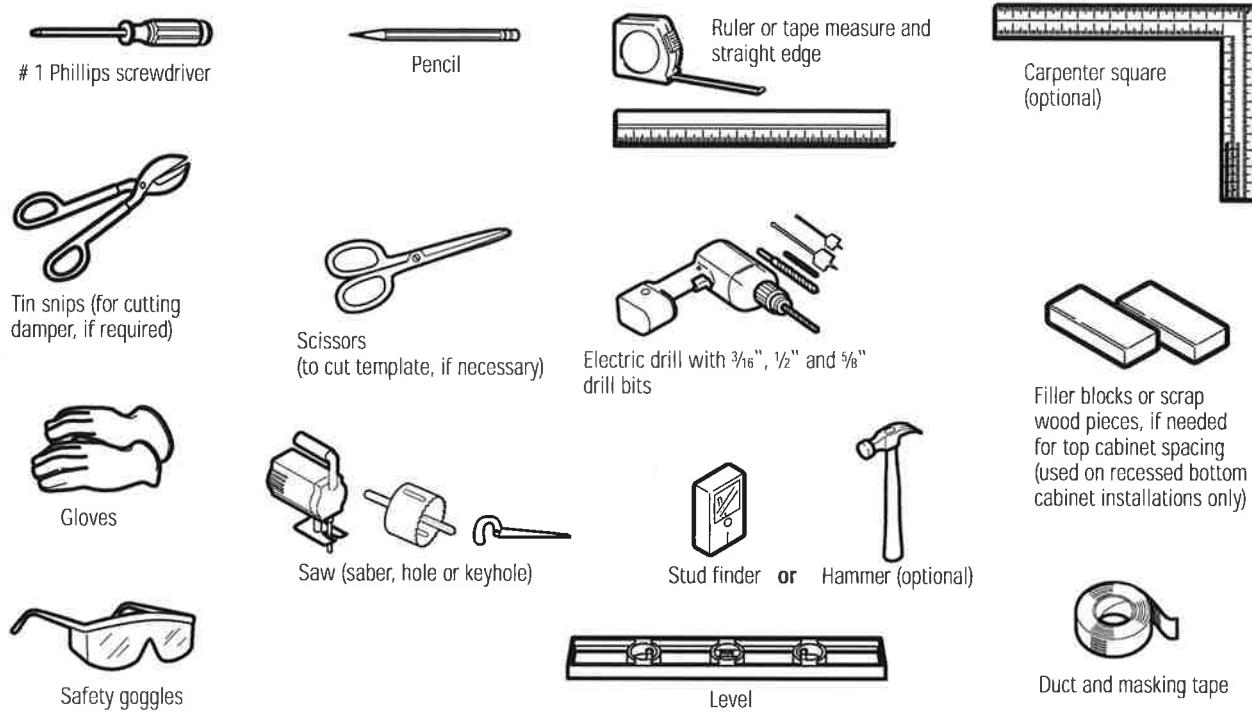
NOTE: Some extra parts are included.

PARTS INCLUDED (CONT.) ADDITIONAL PARTS

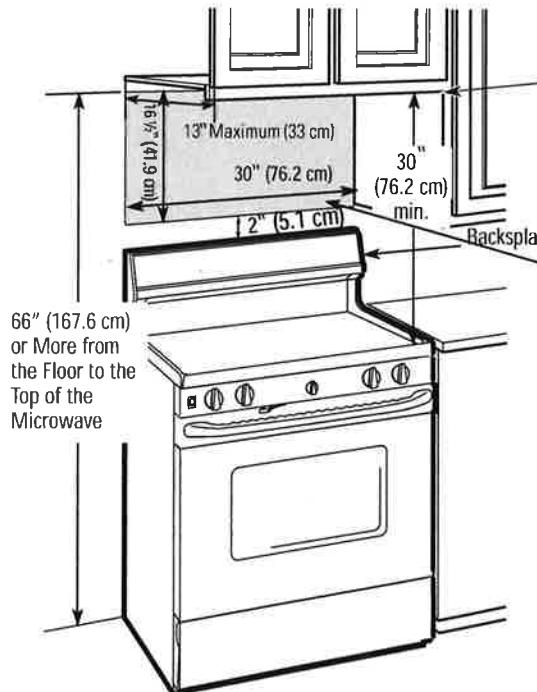
PART	QUANTITY
	Top Cabinet Template
	Rear Wall Template
	Installation Instructions Use & Care Manual
	Separately Packed Grease Filters
	Exhaust adaptor
	Glass Tray
	Turntable Ring
	Convection wire rack
	Shelf
	PureAir® Microwave Filter

Installation Instructions

TOOLS YOU WILL NEED



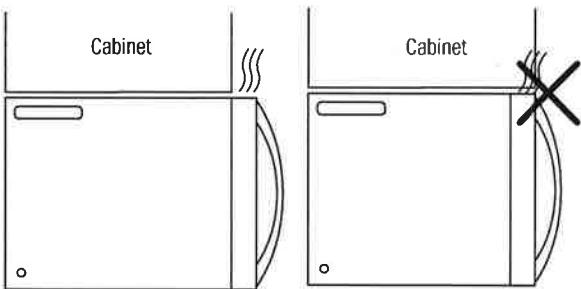
Mounting Space



Bottom Edge of Cabinet Needs to be 30" (76.2 cm) or More from the Cooking Surface

NOTES:

- The space between the cabinets must be 30" (76.2 cm) wide and free of obstructions.
 - If you are going to vent your microwave oven to the outside, see Hood Exhaust Section for exhaust duct preparation.
 - When installing the microwave oven beneath smooth, flat cabinets, be careful to follow the instructions on the top cabinet template for power cord clearance.
 - As a guide to installation, see page 24 for Mounting Template Information.
 - If the cabinet depth including the cabinet doors is more than 13" then the unit must be spaced out from wall using adequate materials supporting 150 lbs to allow proper top vent air exhaust/intake.

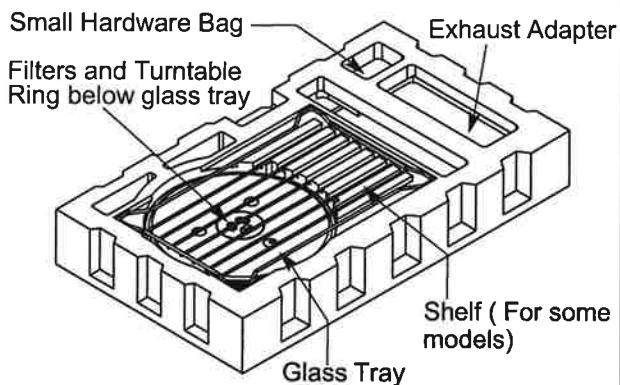


Installation Instructions

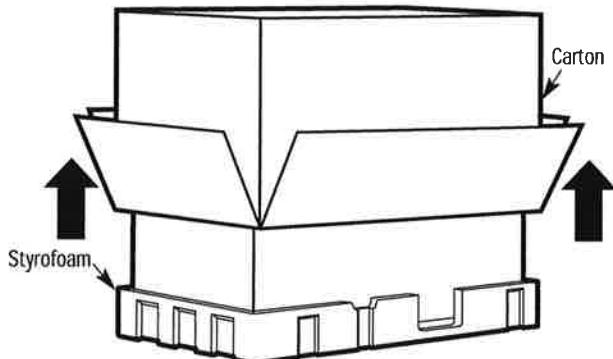
1 PLACEMENT OF THE MOUNTING PLATE

A. REMOVING THE MICROWAVE OVEN FROM THE CARTON/ REMOVING THE MOUNTING PLATE

- 1 Remove the installation instructions, use and care, exhaust adapter, turntable ring, shelf, filters, glass tray and the small hardware bag. Do not remove the Styrofoam protecting the front of the oven.

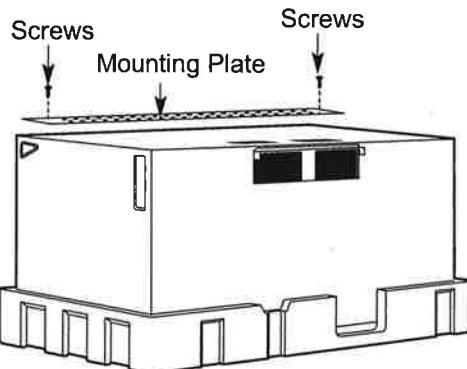


- 2 Fold back all 4 carton flaps fully against carton sides. Then carefully roll the oven and carton over onto the top side. The oven should be resting in the Styrofoam.



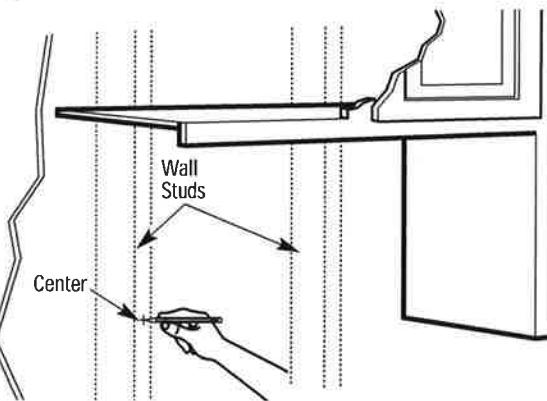
- 3 Pull the carton up and off the oven.

- 4 Cut the middle of the outer protective plastic bag to remove the mounting plate



- 5 Remove the screws from each end of the mounting plate. This plate will be used as the rear wall template and for mounting. Reinstall the screws into the holes where they were removed.

B. FINDING THE WALL STUDS



- 1 Find the studs, using one of the following methods:

A. Stud finder – a magnetic device which locates nails.

B. Use a hammer to tap lightly across the mounting surface to find a solid sound. This will indicate a stud location.

- 2 After locating the stud(s), find the center by probing the wall with a small nail to find the edges of the stud. Then place a mark halfway between the edges. The center of any adjacent studs should be 16" (40.6 cm) or 24" (61 cm) from this mark.

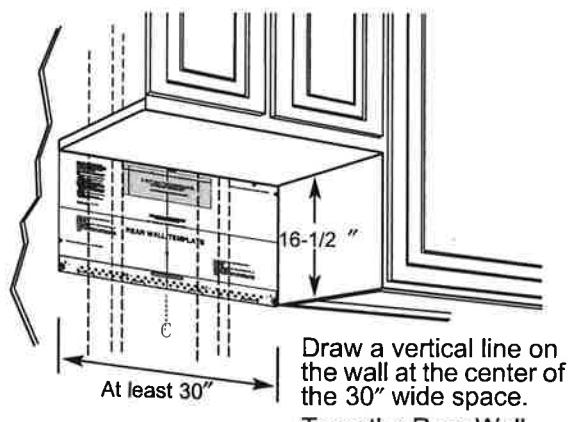
- 3 Draw a line down the center of the studs.

THE MICROWAVE MUST BE CONNECTED TO AT LEAST ONE WALL STUD.

Installation Instructions

C. DETERMINING WALL PLATE LOCATION UNDER YOUR CABINET

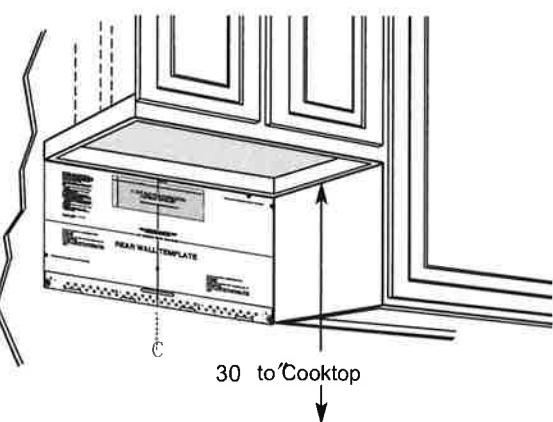
Plate position-beneath flat bottom cabinet



Draw a vertical line on the wall at the center of the 30" wide space.

Tape the Rear Wall Template onto the wall matching the centerline and touching the bottom of the cabinet.

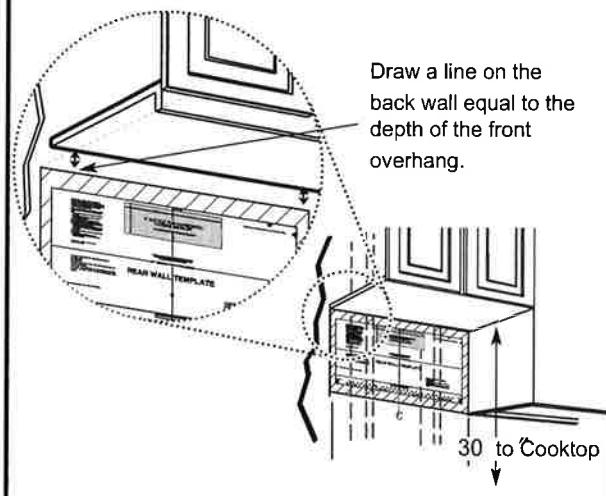
Plate position-beneath framed recessed cabinet bottom



Draw a vertical line on the wall at the center of the 30" space.

Tape the Rear Wall Template onto the wall matching the centerline and touching the bottom cabinet frame.

Plate position-beneath recessed bottom cabinet with front overhang



Draw a line on the back wall equal to the depth of the front overhang.

Your cabinets may have decorative trim that interferes with the microwave installation. Remove the decorative trim to install the microwave properly and to make it level.

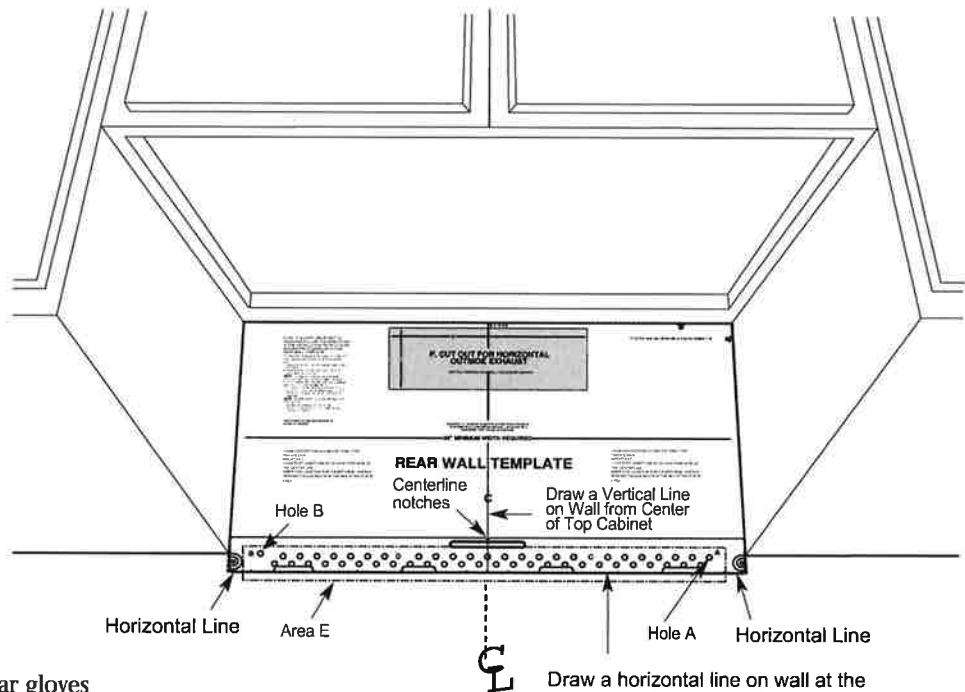
THE MICROWAVE MUST BE LEVEL.

Use a level to make sure the cabinet bottom is level. If the cabinets have a front overhang only, with no back or side frame, install the mounting plate down the same distance as the front overhang depth. This will keep the microwave level.

- 1 Measure the inside depth of the front overhang.
- 2 Draw a horizontal line on the back wall an equal distance below the cabinet bottom as the inside depth of the front overhang.
- 3 For this type of installation with front overhang only, align the mounting tabs with this horizontal line, not touching the cabinet bottom as described in Step D.

Installation Instructions

D. ALIGNING THE WALL PLATE



CAUTION: Wear gloves to avoid cutting fingers on sharp edges.

- 1 Draw a vertical line on the wall at the center of the 30" wide space.
- 2 Draw a horizontal line on the wall at the bottom of "Rear Wall Template".
- 3 Find a wall stud in area "E" of mounting plate Refer to section 1B. Finding the wall studs.
- 4 For attaching the mounting plate into stud drill a 3/16" hole into wood stud. Drill a 5/8" hole for toggle bolt in 1 other location (Hole A or Hole B)

NOTE: DO NOT MOUNT THE PLATE AT THIS TIME.

NOTE: Holes A and B are inside area E. If neither of Holes A and B are not in a stud, find a stud somewhere in area E and draw a circle to line up with the stud. It is important to have **at least one wood screw mounted firmly in a stud** to support the weight of the microwave. **Set the mounting plate aside.**

Installation Instructions

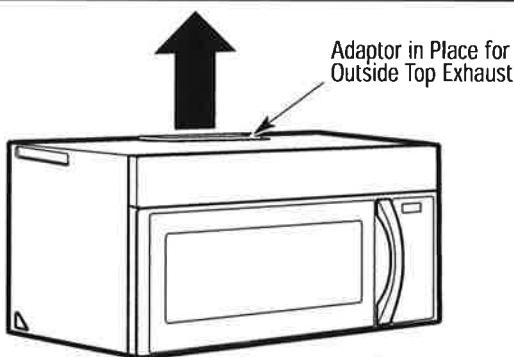
2 INSTALLATION TYPES (Choose A, B or C)

This microwave oven is designed for adaptation to the following three types of ventilation:

- A. Outside Top Exhaust (Vertical Duct)
- B. Outside Back Exhaust (Horizontal Duct)
- C. Recirculating (Non-Vented Ductless)

NOTE: This microwave is shipped assembled for Recirculating. Select the type of ventilation required for your installation and proceed to that section.

A OUTSIDE TOP EXHAUST (VERTICAL DUCT)



See page 12

B OUTSIDE BACK EXHAUST (HORIZONTAL DUCT)



See page 16

C RECIRCULATING (NON-VENTED DUCTLESS)



See page 20

Models are shipped for recirculating exhaust. Some models have a disposable charcoal filter installed to help remove smoke and odors.

NOTE: Read the next two pages only if you plan to vent your exhaust to the outside. If you plan to recirculate the air back into the room, proceed to page 20.

Installation Instructions

INSTALLATION INSTRUCTIONS FOR EXTERNAL EXHAUST DUCTING

NOTE: If you need to install ducts, note that the total duct length of $3\frac{1}{4}'' \times 10''$ (8.2 x 25.4 cm) rectangular or 5" (12.7 cm) diameter/ 6" (15.2 cm) diameter round duct should not exceed 120 equivalent feet (36.5 m).

Outside ventilation requires an EXTERNAL EXHAUST DUCT. Read the following carefully.

NOTE: It is important that venting be installed using the most direct route and with as few elbows as possible. This ensures clear venting of exhaust and helps prevent blockages. Also, make sure dampers swing freely and nothing is blocking the ducts.

Exhaust connection:

The exhaust adaptor has been designed to mate with a standard $3\frac{1}{4}'' \times 10''$ (8.2 x 25.4 cm) rectangular duct.

If a round duct is required, a rectangular-to-round transition adaptor must be used. A 5" (12.7cm)/ 6" (15.2cm) diameter duct is acceptable to use.

Maximum duct length:

For satisfactory air movement, the total duct length of $3\frac{1}{4}'' \times 10''$ (8.2 x 25.4 cm) rectangular or 5" (12.7 cm) diameter/ 6" (15.2 cm) diameter round duct should not exceed 120 equivalent feet (36.5 m).

Elbows, transitions, wall and roof caps, etc., present additional resistance to airflow and are equivalent to a section of straight duct which is longer than their actual physical size. When calculating the total duct length, add the equivalent lengths of all transitions and adaptors plus the length of all straight duct sections. The chart below shows you how to calculate total equivalent ductwork length using the approximate feet of equivalent length of some typical ducts.

DUCT PIECES	EQUIVALENT LENGTH	x	NUMBER USED	=	EQUIVALENT LENGTH
	5 Ft. (1.5 m)	x	()	=	Ft. or m
	40 Ft. (12.2 m)	x	()	=	Ft. or m
	10 Ft. (3 m)	x	()	=	Ft. or m
	5 Ft. (1.5 m)	x	()	=	Ft. or m
	25 Ft. (7.6 m)	x	()	=	Ft. or m
	5 Ft. (1.5 m)	x	()	=	Ft. or m
	24 Ft. (7.3 m)	x	()	=	Ft. or m
	1 Ft. (0.3 m)	x	()	=	Ft. or m
Total Ductwork				=	Ft. or m



* **IMPORTANT:** If a rectangular-to-round transition adaptor is used, the bottom corners of the damper will have to be cut to fit, using the tin snips, in order to allow free movement of the damper.

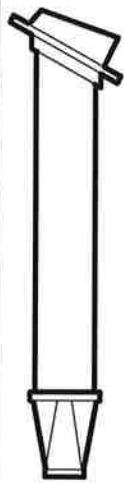
Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood.

Installation Instructions

EXTERNAL EXHAUST DUCTING

OUTSIDE TOP EXHAUST (EXAMPLE ONLY)

The following chart describes an example of one possible ductwork installation.

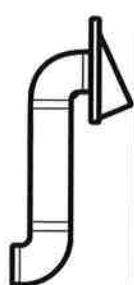


DUCT PIECES	EQUIVALENT LENGTH	x	NUMBER USED	=	EQUIVALENT LENGTH	
	Roof Cap	24 Ft. (7.3 m)	x	(1)	=	24 Ft. (7.3 m)
	12 Ft. (3.6 m) Straight Duct (6"/15.2 cm Round)	12 Ft. (3.6 m)	x	(1)	=	12 Ft. (3.6 m)
	Rectangular-to-Round Transition Adaptor*	5 Ft. (1.5 m)	x	(1)	=	5 Ft. (1.5 m)
Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood.					Total Length = 41 Ft. (12.5 m)	

* IMPORTANT: If a rectangular-to-round transition adaptor is used, the bottom corners of the damper will have to be cut to fit, using the tin snips, in order to allow free movement of the damper.

OUTSIDE BACK EXHAUST (EXAMPLE ONLY)

The following chart describes an example of one possible ductwork installation.



DUCT PIECES	EQUIVALENT LENGTH*	x	NUMBER USED	=	EQUIVALENT LENGTH	
	Wall Cap	40 Ft. (12.2 m)	x	(1)	=	40 Ft. (12.2 m)
	3 Ft. Straight Duct (3 1/4" x 10"/8.2 x 25.4 cm Rectangular)	3 Ft. (0.9 m)	x	(1)	=	3 Ft. (0.9 m)
	90° Elbow	10 Ft. (3 m)	x	(2)	=	20 Ft. (3 m)
Equivalent lengths of duct pieces are based on actual tests and reflect requirements for good venting performance with any vent hood.					Total Length = 63 Ft. (19.2 m)	

NOTE: For back exhaust, care should be taken to align exhaust with space between studs, or wall should be prepared at the time it is constructed by leaving enough space between the wall studs to accommodate exhaust.

Installation Instructions

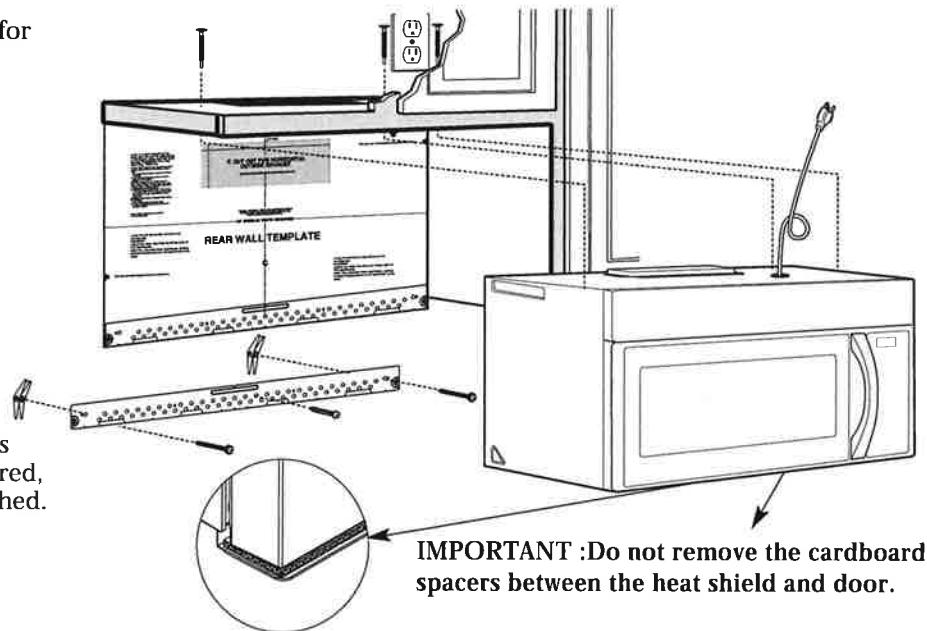
A OUTSIDE TOP EXHAUST (Vertical Duct)

INSTALLATION OVERVIEW

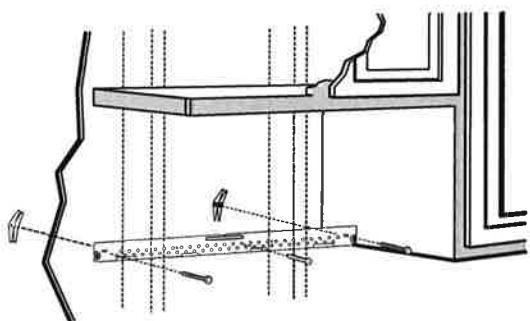
- A1. Attach Mounting Plate to Wall
- A2. Prepare Top Cabinet
- A3. Adapting Microwave Blower for Outside Top Exhaust
- A4. Check Damper Operation
- A5. Mount Microwave Oven
- A6. Adjust Exhaust Adaptor
- A7. Connect Ductwork

IMPORTANT NOTES:

- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled. This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.



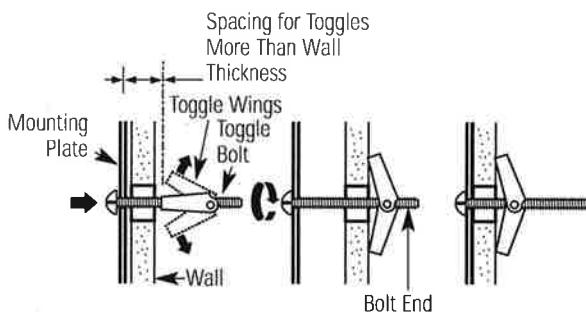
A1. ATTACH THE MOUNTING PLATE TO THE WALL



Attach the plate to the wall using toggle bolts. At least one wood screw must be used to attach the plate to a wall stud.

- 1 Remove the toggle wings from the bolts.
- 2 Insert the bolts into the mounting plate through the holes designated to go into drywall and reattach the toggle wings to $\frac{3}{4}$ " (19 mm) onto each bolt.

To use toggle bolts:



- 3 Place the mounting plate against the wall and insert the toggle wings into the holes in the wall to mount the plate.

NOTE: Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

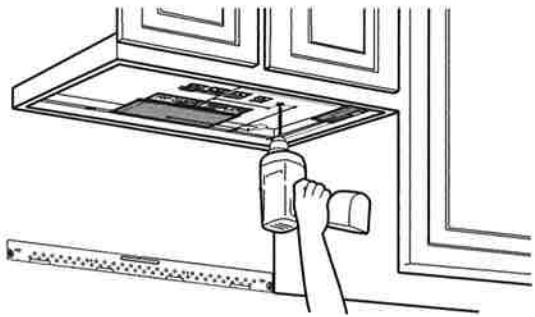
CAUTION: Be careful to avoid pinching fingers between the back of the mounting plate and the wall.

- 4 Tighten all bolts. Pull the plate away from the wall to help tighten the bolts.

Installation Instructions

A2. USE TOP CABINET TEMPLATE FOR PREPARATION OF TOP CABINET

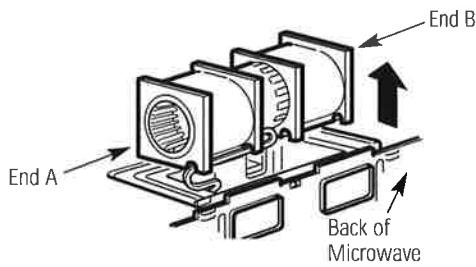
You need to drill holes for the top support screws, a hole large enough for the power cord to fit through, and a cutout large enough for the exhaust adaptor.



- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.
- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

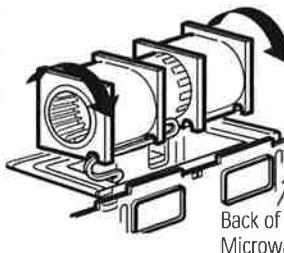
CAUTION: Wear safety goggles when drilling holes in the cabinet bottom.

- 2** Carefully pull out the blower unit. The wires will extend far enough to allow you to adjust the blower unit.

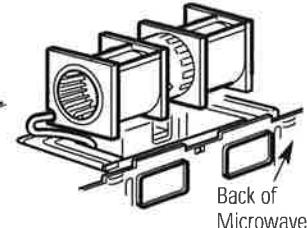


- 3** Roll the blower unit 90° so that fan blade openings are facing out the top of the microwave.

Before Rotation

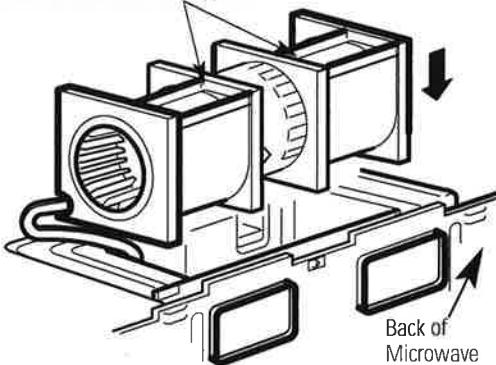


After Rotation



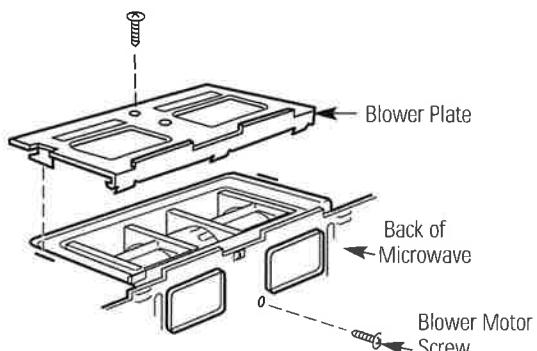
- 4** Place the blower unit back into the opening.

AFTER: Fan Blade Openings Facing Top



A3. ADAPTING MICROWAVE BLOWER FOR OUTSIDE TOP EXHAUST

- 1** Place the microwave in its upright position, with the top of the unit facing up.



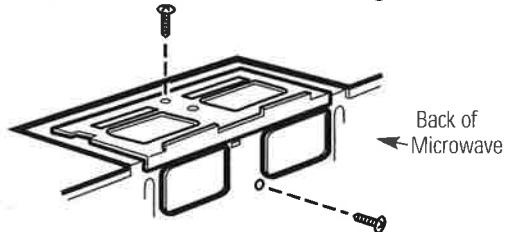
Remove the screw that holds the blower plate to the microwave. Remove and save the screw holding the blower motor to the microwave.

CAUTION: Do not pull or stretch the blower unit wiring. Make sure the wires are not pinched, and that they are properly secured.

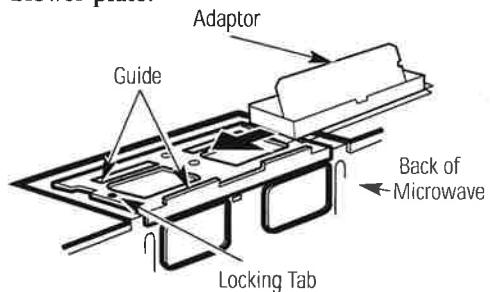
Installation Instructions

A3. ADAPTING MICROWAVE BLOWER FOR OUTSIDE TOP EXHAUST

- 5 Secure blower unit to microwave with the screw removed in Step 1. Make sure the screw is tight.
- 6 Replace blower plate with the screw removed in Step 1. Make sure the screw is tight.

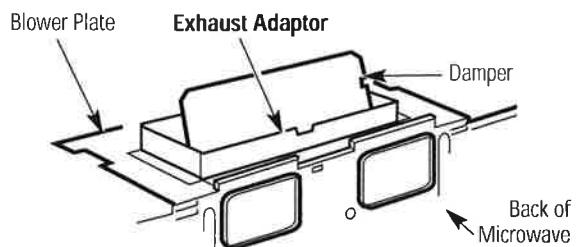


- 7 Attach the exhaust adaptor to the top of the blower plate by sliding it into the guides of the blower plate.



Push in securely until it is in the locking tabs. Take care to assure that the damper hinge is installed so that the damper swings freely.

A4. CHECK FOR PROPER DAMPER OPERATION



- Make sure tape securing damper is removed and damper pivots easily before mounting microwave.
- You will need to make adjustments to assure proper alignment with your house exhaust duct after the microwave is installed.

A5. MOUNT THE MICROWAVE OVEN



FOR EASIER INSTALLATION AND PERSONAL SAFETY, WE RECOMMEND THAT TWO PEOPLE INSTALL THIS MICROWAVE OVEN.

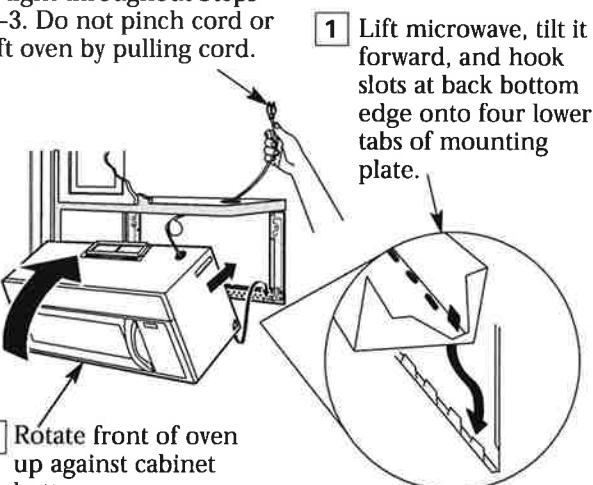
IMPORTANT: Do not grip or use the handle or heat shield during installation. Do not remove the cardboard spacers between the heat shield and door.

NOTE: If your cabinet is metal, use the nylon grommet around the power cord hole to prevent cutting of the cord.

NOTE: We recommend using filler blocks if the cabinet front hangs below the cabinet bottom shelf.

IMPORTANT: If filler blocks are not used, case damage may occur from overtightening screws.

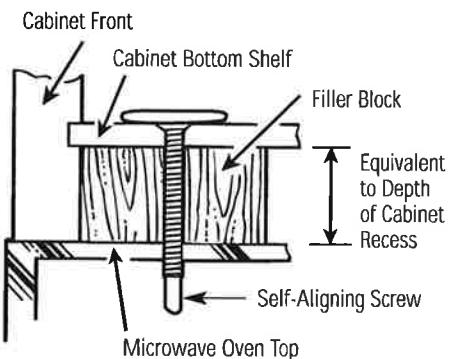
NOTE: When mounting the microwave oven, thread power cord through hole in bottom of top cabinet. Keep it tight throughout Steps 1-3. Do not pinch cord or lift oven by pulling cord.



- 1 Lift microwave, tilt it forward, and hook slots at back bottom edge onto four lower tabs of mounting plate.
- 2 Rotate front of oven up against cabinet bottom.
- 3 Insert a self-aligning screw through top center cabinet hole. Temporarily secure the oven by turning the screw at least two full turns after the threads have engaged. (It will be completely tightened later.) Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.

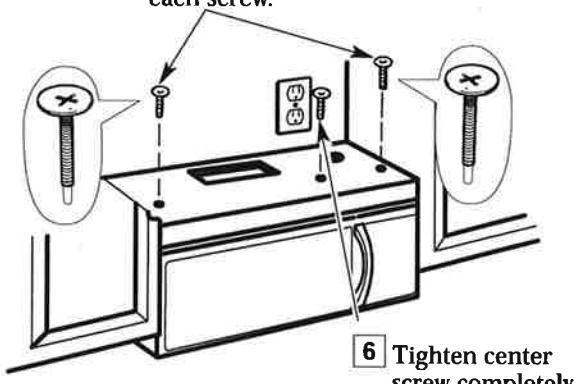
Installation Instructions

A5. MOUNT THE MICROWAVE OVEN (cont.)



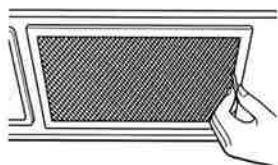
- 4 Attach the microwave oven to the top cabinet.

- 5 Insert 2 self-aligning screws through outer top cabinet holes. Turn two full turns on each screw.



- 6 Tighten center screw completely.

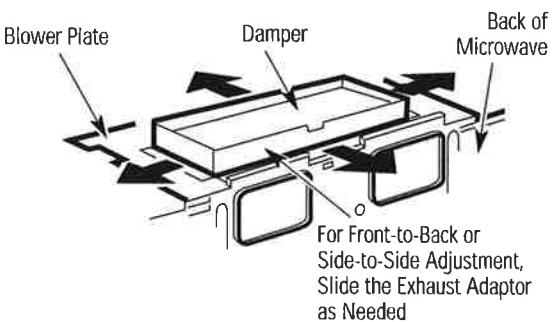
- 7 Tighten the outer two screws to the top of the microwave oven. (While tightening screws, hold the microwave oven in place against the wall and the top cabinet.)



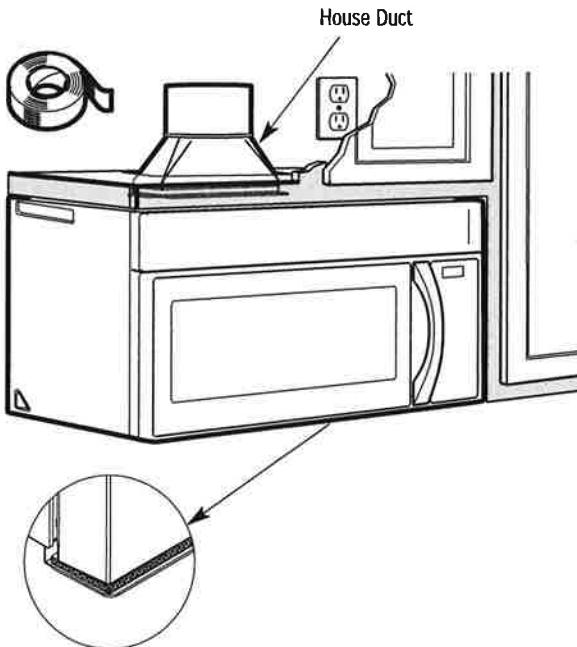
- 8 Install grease filters. See the Use and Care packed with the microwave.

A6. ADJUST THE EXHAUST ADAPTOR

Open the top cabinet and adjust the exhaust adaptor to connect to the house duct.



A7. CONNECTING DUCTWORK



- 1 Extend the house duct down to connect to the exhaust adaptor.
2 Seal exhaust duct joints using furnace duct tape for high temperature applications.

IMPORTANT: Remove the cardboard spacers between heat shield and door.

Installation Instructions

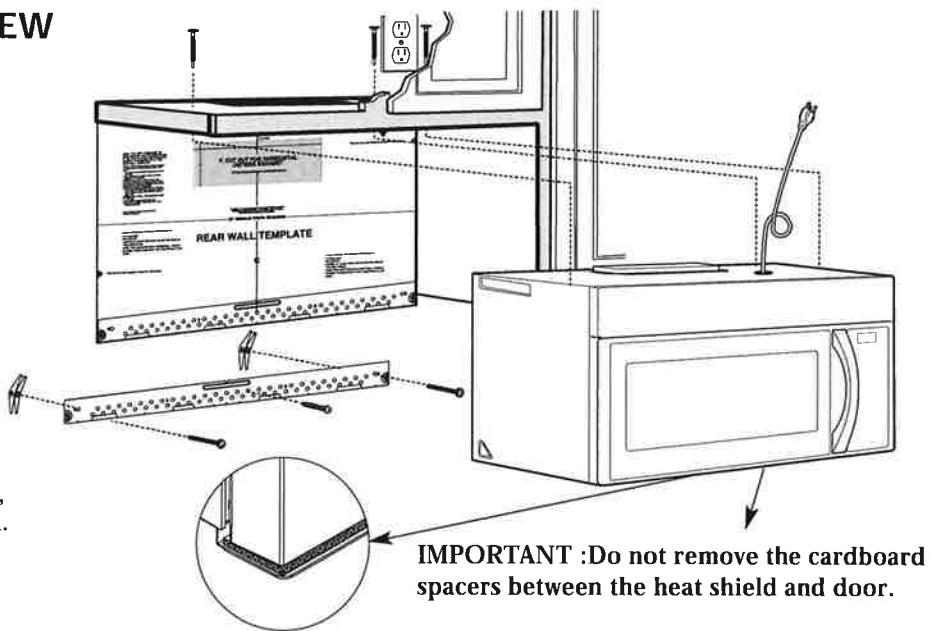
B OUTSIDE BACK EXHAUST (Horizontal Duct)

INSTALLATION OVERVIEW

- B1. Prepare Rear Wall
- B2. Remove Blower Plate
- B3. Attach Mounting Plate to Wall
- B4. Prepare Top Cabinet
- B5. Adjust Blower
- B6. Mount the Microwave Oven

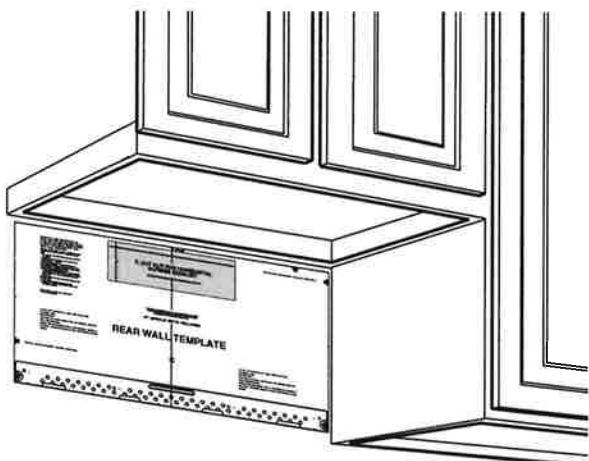
IMPORTANT NOTES:

- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled. This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.



B1. PREPARING THE REAR WALL FOR OUTSIDE BACK EXHAUST

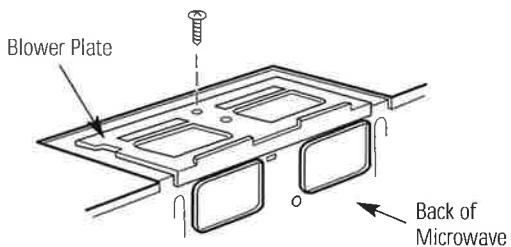
You need to cut an opening in the rear wall for outside exhaust.



- Read the instructions on the REAR WALL TEMPLATE.
- Tape it to the rear wall.
- Cut the opening, following the instructions of the REAR WALL TEMPLATE.

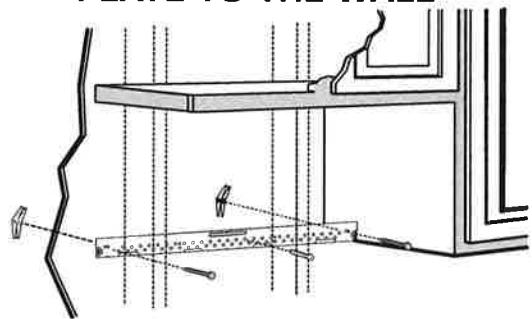
B2. REMOVE BLOWER PLATE

Remove and save the screw that holds the blower plate to the microwave. Lift off the blower plate.



Installation Instructions

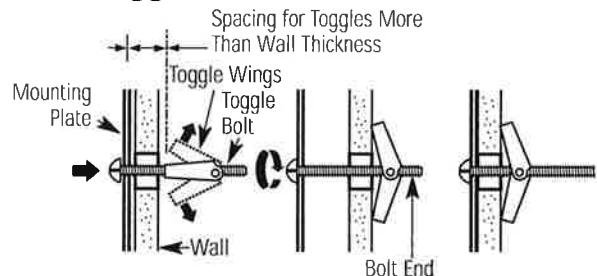
B3. ATTACH THE MOUNTING PLATE TO THE WALL



Attach the plate to the wall using toggle bolts. At least one wood screw must be used to attach the plate to a wall stud.

- 1 Remove the toggle wings from the bolts.
- 2 Insert the bolts into the mounting plate through the holes designated to go into drywall and reattach the toggle wings to $\frac{3}{4}$ " (19 mm) onto each bolt.

To use toggle bolts:



- 3 Place the mounting plate against the wall and insert the toggle wings into the holes in the wall to mount the plate.

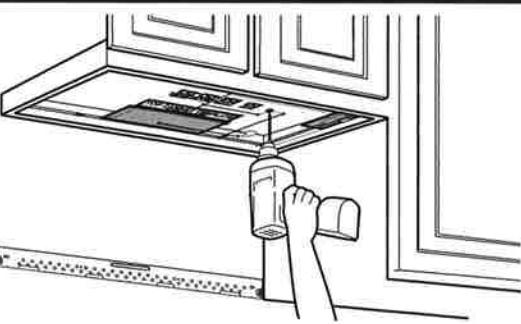
NOTE: Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

CAUTION: Be careful to avoid pinching fingers between the back of the mounting plate and the wall.

- 4 Tighten all bolts. Pull the plate away from the wall to help tighten the bolts.

B4. USE TOP CABINET TEMPLATE FOR PREPARATION OF TOP CABINET

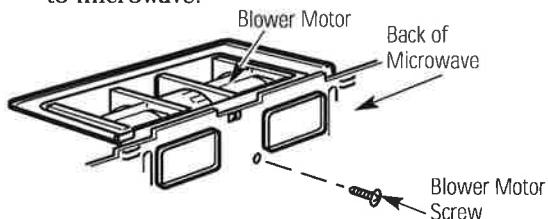
You need to drill holes for the top support screws and a hole large enough for the power cord to fit through.



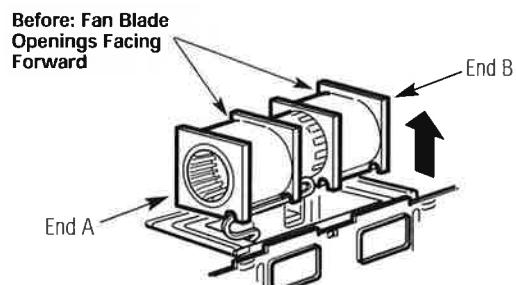
- Read the instructions on the TOP CABINET TEMPLATE.
 - Tape it underneath the top cabinet.
 - Drill the holes, following the instructions on the TOP CABINET TEMPLATE.
- CAUTION: Wear safety goggles when drilling holes in the cabinet bottom.

B5. ADAPTING MICROWAVE BLOWER FOR OUTSIDE BACK EXHAUST

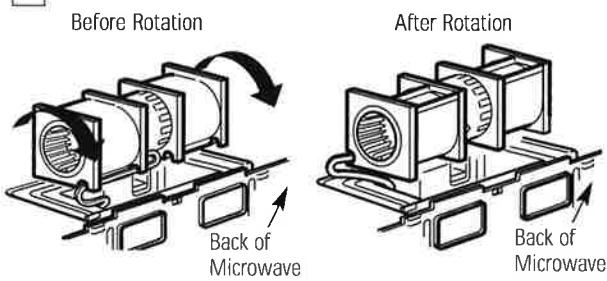
- 1 Remove and save screw that holds blower motor to microwave.



- 2 Carefully pull out the blower unit. The wires will extend far enough to allow you to adjust the blower unit.



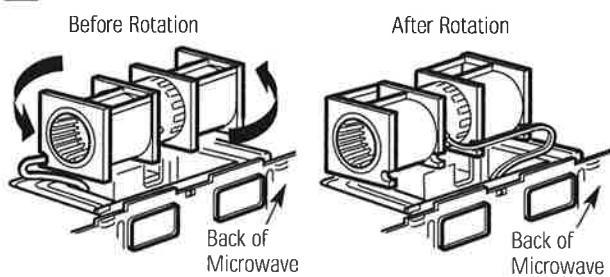
- 3 Roll the blower unit 90°



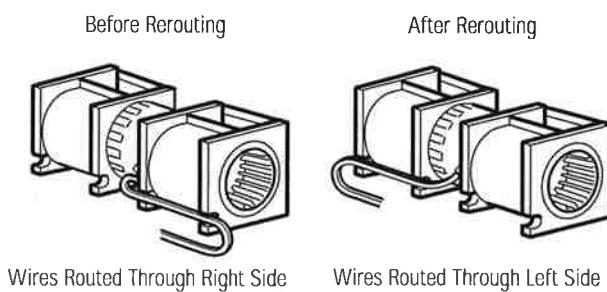
Installation Instructions

B5. ADAPTING MICROWAVE BLOWER FOR OUTSIDE BACK EXHAUST (cont.)

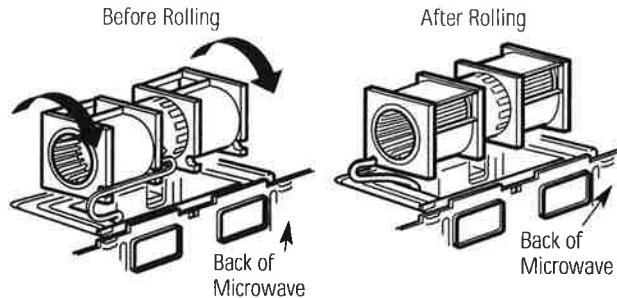
- 4 Rotate blower unit counterclockwise 180°.



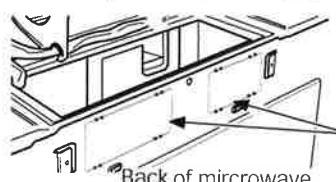
- 5 Gently remove the wires from the grooves. Reroute the wires through grooves on other side of the blower unit.



- 6 Roll the blower unit 90° so that fan blade openings are facing out the back of the microwave.



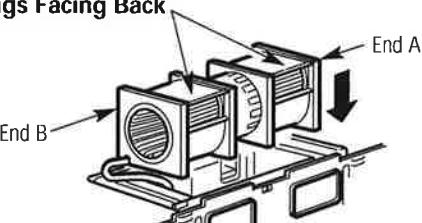
- 7 Remove the knockout plates in the back of the unit with snips. (For some models)



Knockout Plates:
Snip all 4 webs on each knockout panel and remove the metal knockouts for rear airflow. Please take care to remove any sharp edges created from removing the knockout plates.

- 8 Place the blower unit back into the opening.

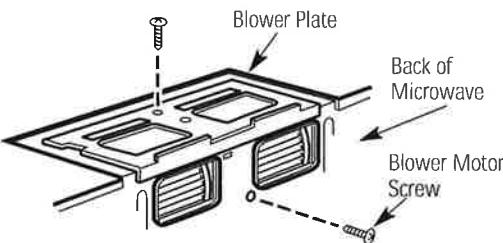
AFTER: Fan Blade Openings Facing Back



CAUTION: Do not pull or stretch the blower unit wiring. Make sure the wires are not pinched, and that they are properly secured.

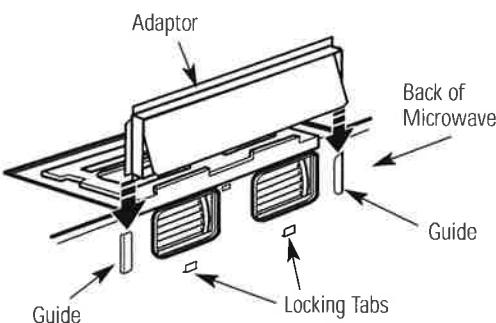
NOTE: The blower unit exhaust openings should match exhaust openings on rear of microwave oven.

- 9 Secure the blower unit to the microwave with the original screw.



- 10 Replace the blower plate in the same position as before with the screw. Make sure the screw is tight.

- 11 Attach the exhaust adaptor to the rear of the oven by sliding it into the guides at the top center of the back of the oven.



Push in securely until it is in the lower locking tabs. Take care to assure that the damper hinge is installed so that it is at the top and that the damper swings freely.

Installation Instructions

B6. MOUNT THE MICROWAVE OVEN



FOR EASIER INSTALLATION AND PERSONAL SAFETY, WE RECOMMEND THAT TWO PEOPLE INSTALL THIS MICROWAVE OVEN.

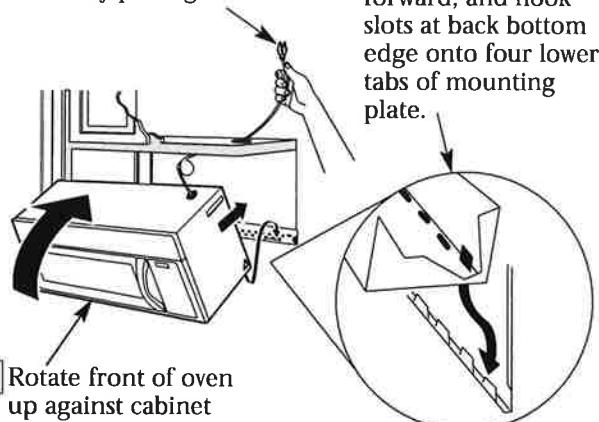
IMPORTANT: Do not grip or use the handle or heat shield during installation. Do not remove the cardboard spacers between the heat shield and door.

NOTE: If your cabinet is metal, use the nylon grommet around the power cord hole to prevent cutting of the cord.

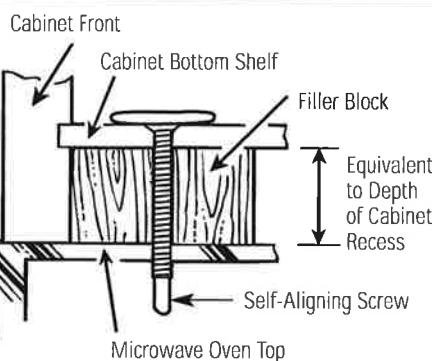
NOTE: We recommend using filler blocks if the cabinet front hangs below the cabinet bottom shelf.

IMPORTANT: If filler blocks are not used, case damage may occur from overtightening screws.

NOTE: When mounting the microwave oven, thread power cord through hole in bottom of top cabinet. Keep it tight throughout Steps 1-3. Do not pinch cord or lift oven by pulling cord.

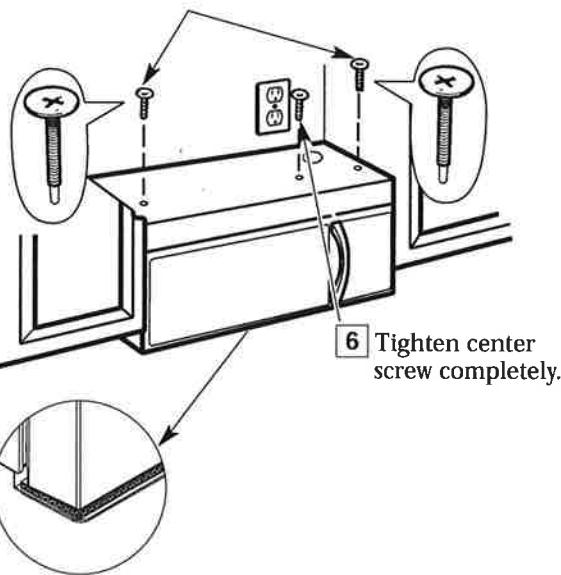


- 1 Lift microwave, tilt it forward, and hook slots at back bottom edge onto four lower tabs of mounting plate.
- 2 Rotate front of oven up against cabinet bottom.
- 3 Insert a self-aligning screw through top center cabinet hole. Temporarily secure the oven by turning the screw at least two full turns after the threads have engaged. (It will be completely tightened later.) Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.



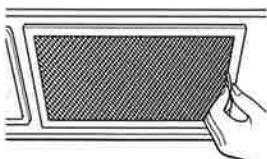
- 4 Attach the microwave oven to the top cabinet.

- 5 Insert 2 self-aligning screws through outer top cabinet holes. Turn two full turns on each screw.



- 6 Tighten center screw completely.

- 7 Tighten the outer two screws to the top of the microwave oven. (While tightening screws, hold the microwave oven in place against the wall and the top cabinet.)



- 8 Install grease filters. See the Use & Care packed with the microwave.

IMPORTANT: Remove the cardboard spacers between heat shield and door.

Installation Instructions

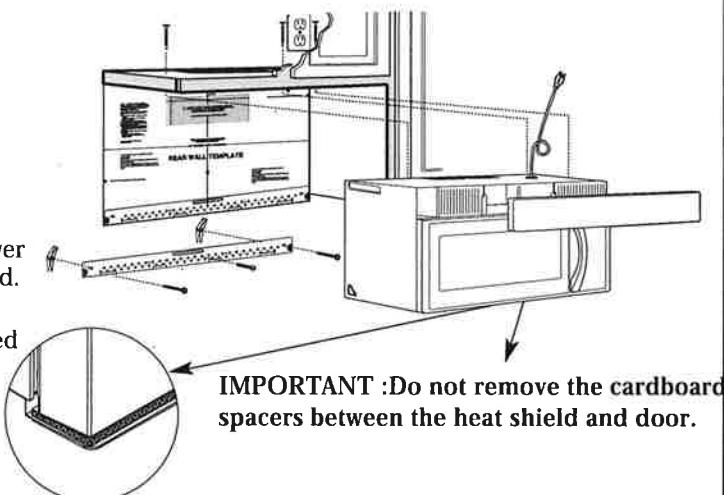
C RECIRCULATING (Non-Vented Ductless)

INSTALLATION OVERVIEW

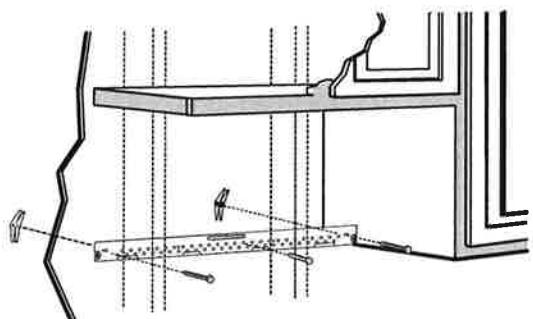
- C1. Attach Mounting Plate to Wall
- C2. Prepare Top Cabinet
- C3. Check Blower Plate
- C4. Mount the Microwave Oven
- C5. Install or change Charcoal Filter

IMPORTANT NOTES:

- Make sure the screws for the blower motor and blower plate are securely tightened when they are reinstalled. This will help to prevent excessive vibration.
- Make sure the motor wiring has been properly routed and secured, and that the wires are not pinched.

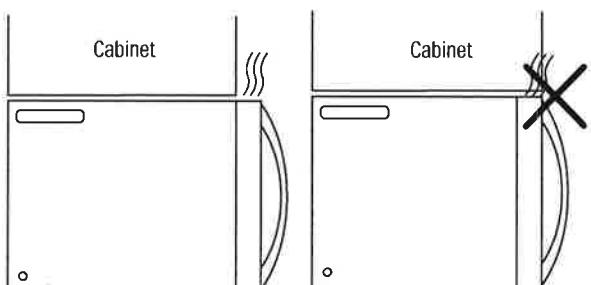


C1. ATTACH THE MOUNTING PLATE TO THE WALL



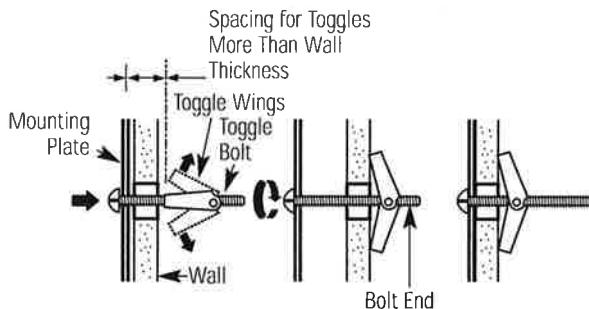
Attach the plate to the wall using toggle bolts. At least one wood screw must be used to attach the plate to a wall stud.

NOTE: If the cabinet depth including the cabinet doors is more than 13" then the unit must be spaced out from wall using adequate materials supporting 150 lbs to allow proper top vent air exhaust/intake.



- 1 Remove the toggle wings from the bolts.
- 2 Insert the bolts into the mounting plate through the holes designated to go into drywall and reattach the toggle wings to $\frac{3}{4}$ " (19 mm) onto each bolt.

To use toggle bolts:



- 3 Place the mounting plate against the wall and insert the toggle wings into the holes in the wall to mount the plate.

NOTE: Before tightening toggle bolts and wood screw, make sure the bottom of the mounting plate touch the bottom of the cabinet when pushed flush against the wall and that the plate is properly centered under the cabinet.

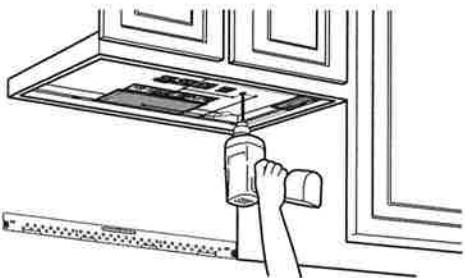
CAUTION: Be careful to avoid pinching fingers between the back of the mounting plate and the wall.

- 4 Tighten all bolts. Pull the plate away from the wall to help tighten the bolts.

Installation Instructions

C2. USE TOP CABINET TEMPLATE FOR PREPARATION OF TOP CABINET

You need to drill holes for the top support screws and a hole large enough for the power cord to fit through.



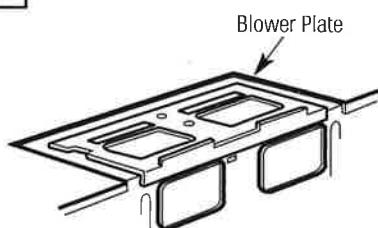
- Read the instructions on the TOP CABINET TEMPLATE.
- Tape it underneath the top cabinet.

NOTE: Adjust top template accordingly if the microwave is being spaced out from the wall due to cabinet depth (including cabinet doors) of more than 13".

- Drill the holes, following the instructions on the TOP CABINET TEMPLATE.

CAUTION: Wear safety goggles when drilling holes in the cabinet bottom.

C3. CHECK BLOWER PLATE



- Place the microwave in its upright position, with the top of the unit facing up.
- Check to see that the blower plate is correctly installed on the unit.

C4. MOUNT THE MICROWAVE OVEN



FOR EASIER INSTALLATION AND PERSONAL SAFETY, WE RECOMMEND THAT TWO PEOPLE INSTALL THIS MICROWAVE OVEN.

IMPORTANT: Do not grip or use the handle or heat shield during installation. Do not remove the cardboard spacers between the heat shield and door.

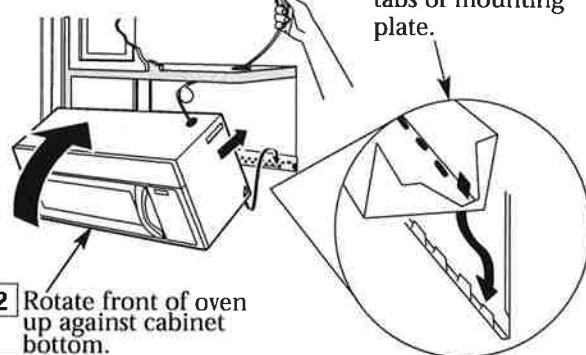
NOTE: If your cabinet is metal, use the nylon grommet around the power cord hole to prevent cutting of the cord.

NOTE: We recommend using filler blocks if the cabinet front hangs below the cabinet bottom shelf.

IMPORTANT: If filler blocks are not used, case damage may occur from overtightening screws.

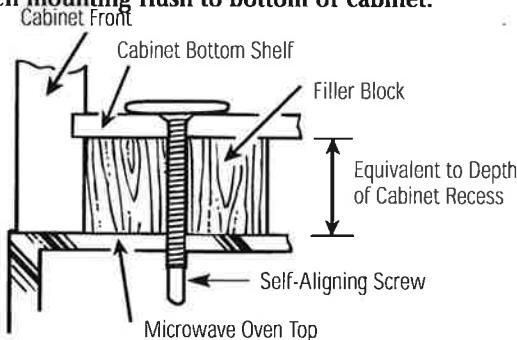
NOTE: When mounting the microwave oven, thread power cord through hole in bottom of top cabinet. Keep it tight throughout Steps 1-3. Do not pinch cord or lift oven by pulling cord.

- 1 Lift microwave, tilt it forward, and hook slots at back bottom edge onto four lower tabs of mounting plate.



- 2 Rotate front of oven up against cabinet bottom.

- 3 Insert a self-aligning screw through top center cabinet hole. Temporarily secure the oven by turning the screw at least two full turns after the threads have engaged. (It will be completely tightened later.) Be sure to keep power cord tight. Be careful not to pinch the cord, especially when mounting flush to bottom of cabinet.

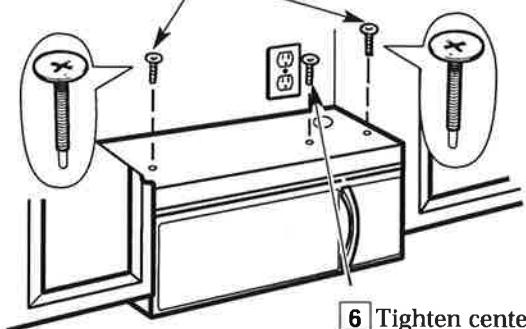


- 4 Attach the microwave oven to the top cabinet.

Installation Instructions

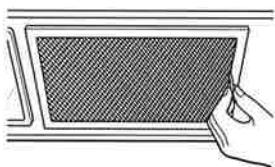
C4. MOUNT THE MICROWAVE OVEN (cont.)

- 5 Insert 2 self-aligning screws through outer top cabinet holes. Turn two full turns on each screw.



- 6 Tighten center screw completely.

- 7 Tighten the outer two screws to the top of the microwave oven. (While tightening screws, hold the microwave oven in place against the wall and the top cabinet.)



- 8 Install grease filters. See the Use & Care packed with the microwave.

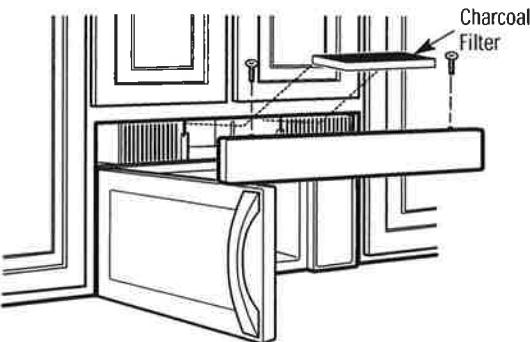
C5. INSTALLING OR CHANGE THE CHARCOAL FILTER (Some Models)

NOTE: The charcoal filter is factory installed in some models. Refer to the Use and Care to see if yours is factory installed and for replacement information.

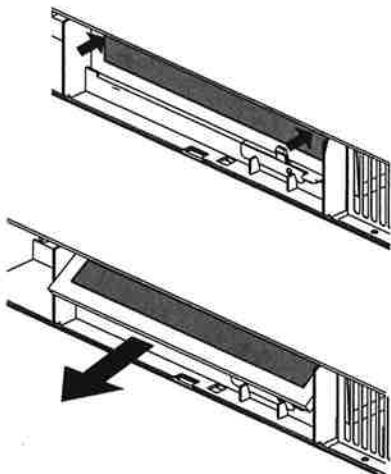
For models without the recirculation filter access door, follow these steps to replace or install a charcoal filter.

- 1 Unplug microwave oven or disconnect power.

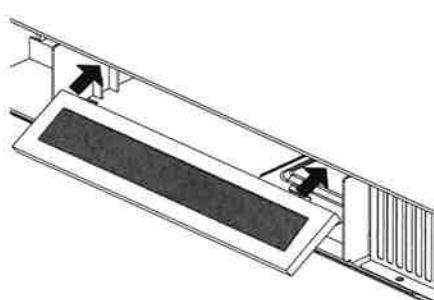
- 2 Open the microwave door and remove the two vent mounting screws located on top of the microwave using a #1 Phillips screwdriver.



- 3 Remove the charcoal filter by pushing the top of the filter inwards, then pull it forward out from the unit.

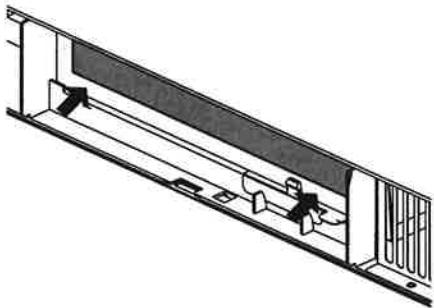


- 4 Slide the top of the new charcoal filter into the top of the filter cavity.

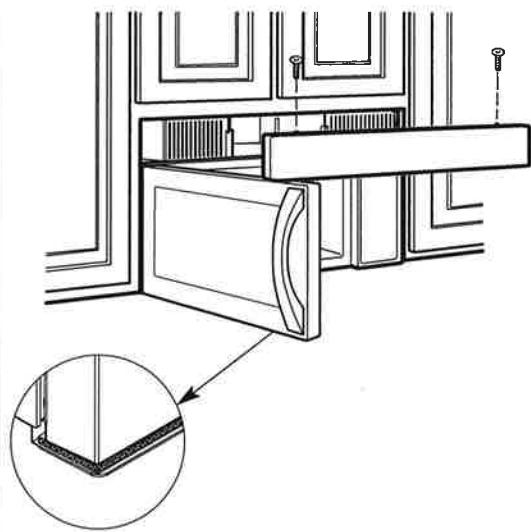


Installation Instructions

- 5** Press the bottom of charcoal filter to place it into the correct position.



- 6** Reinstall the vent by sliding the bottom of the vent into place. Push the vent top into position and slide right into place. Replace the two vent mounting screws located on top of the microwave using a #1 Phillips screwdriver.

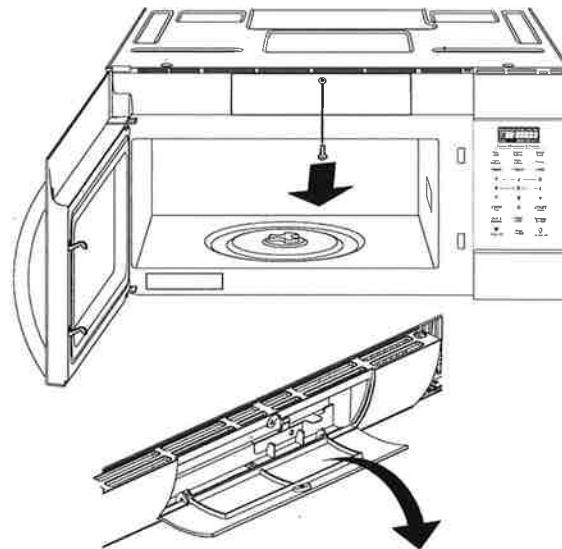


- 7** Close the microwave door. Plug in microwave oven or reconnect power.

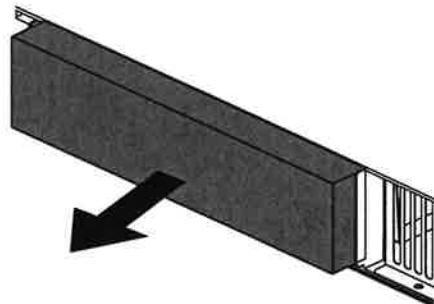
IMPORTANT: Remove the cardboard spacers between heat shield and door.

For models with the recirculation filter access door, follow these steps to replace or install a PureAir® Microwave Filter.

- 1** Remove the PureAir® Filter from the packaging and shake filter to remove excess carbon.
- 2** Use a Phillips head screwdriver to unscrew the PureAir® Filter access door.
- 3** Open the filter access door.

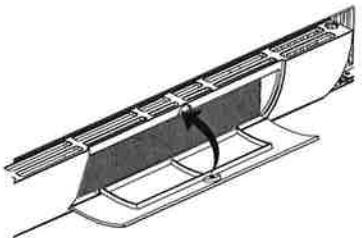
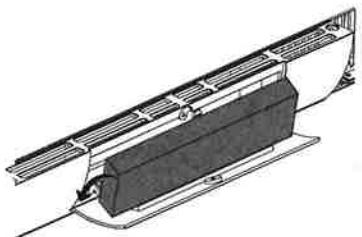


- 4** Remove the existing PureAir® Filter(if installed) by pulling forward out from the unit.



Installation Instructions

- 5** Place the new PureAir® Filter into the slot behind the door at an angle until it's upright and securely placed in the duct.



- 6** Make sure the PureAir® Filter is nested vertically in the slot. Close access door, tighten screw and the PureAir® Filter is ready to use.

Installation Instructions

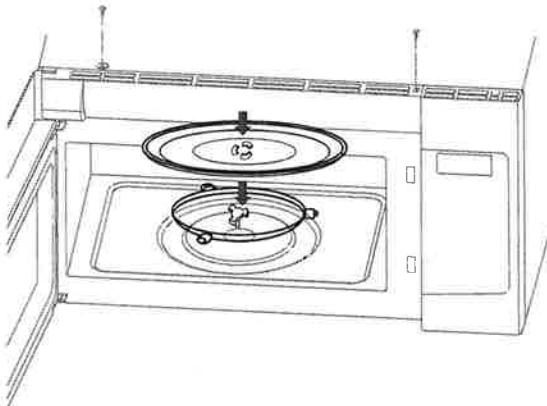
BEFORE YOU USE YOUR MICROWAVE

- 1.** Make sure the microwave oven has been installed according to instructions.

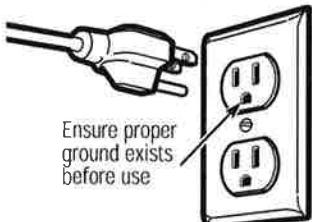


- 2.** Remove all packing material from the microwave oven.

- 3.** Install turntable ring and glass tray in cavity.



- 4.** Plug power cord into a separate and dedicated 15- to 20-amp electrical outlet.



- 5.** Replace house fuse or turn breaker back on.



- 6.** Read the USE & CARE Manual.

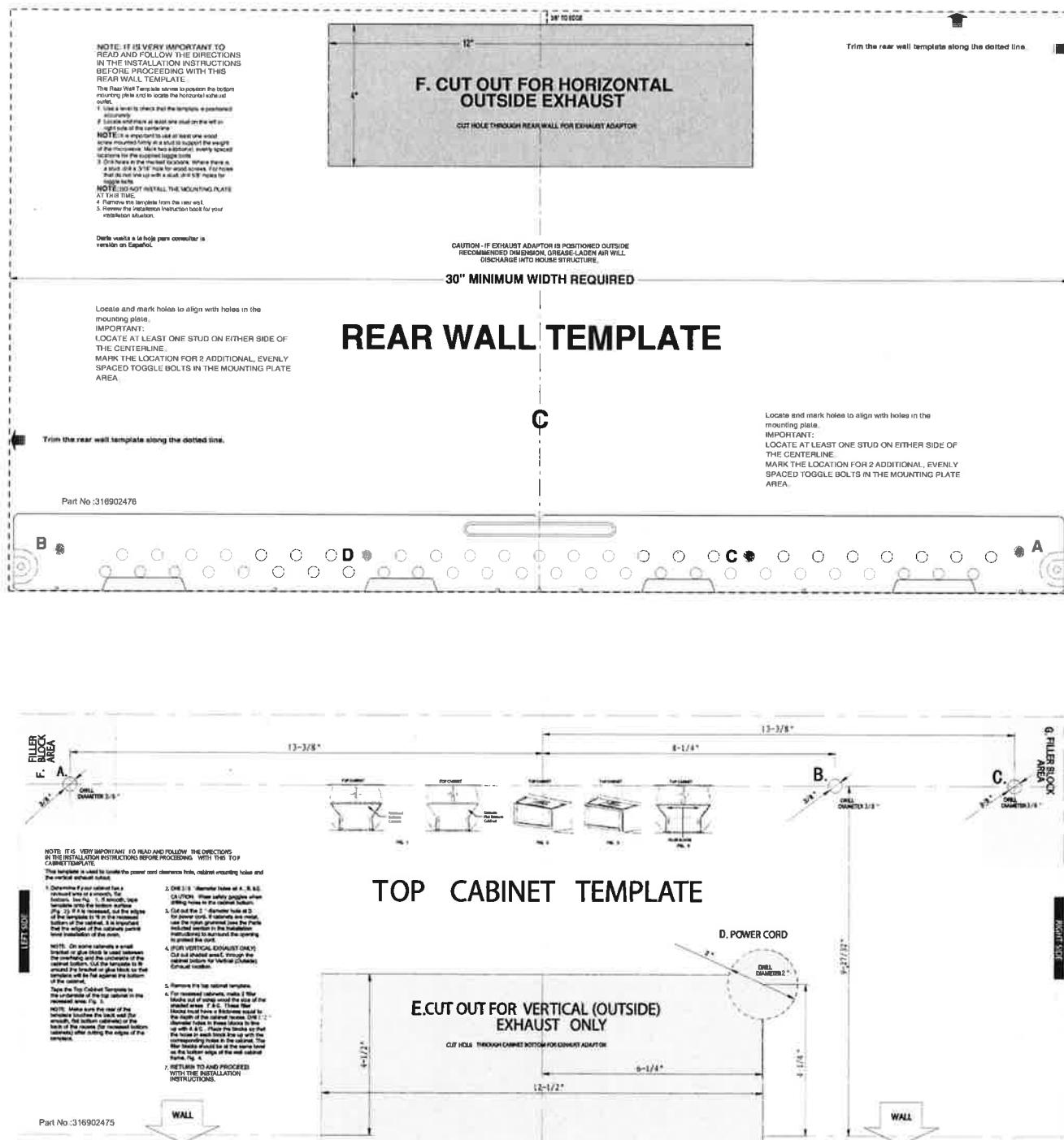


- 7.** KEEP INSTALLATION INSTRUCTIONS FOR THE LOCAL INSPECTOR'S USE.



- 8.** FILL OUT PRODUCT REGISTRATION CARD AND SEND IN.





Instructions d'installation

Four à micro-ondes à hotte intégrée

Des questions? Appelez au 1-800-944-9044(US) ou 1-800-265-8352(Canada)

AVANT DE COMMENCER

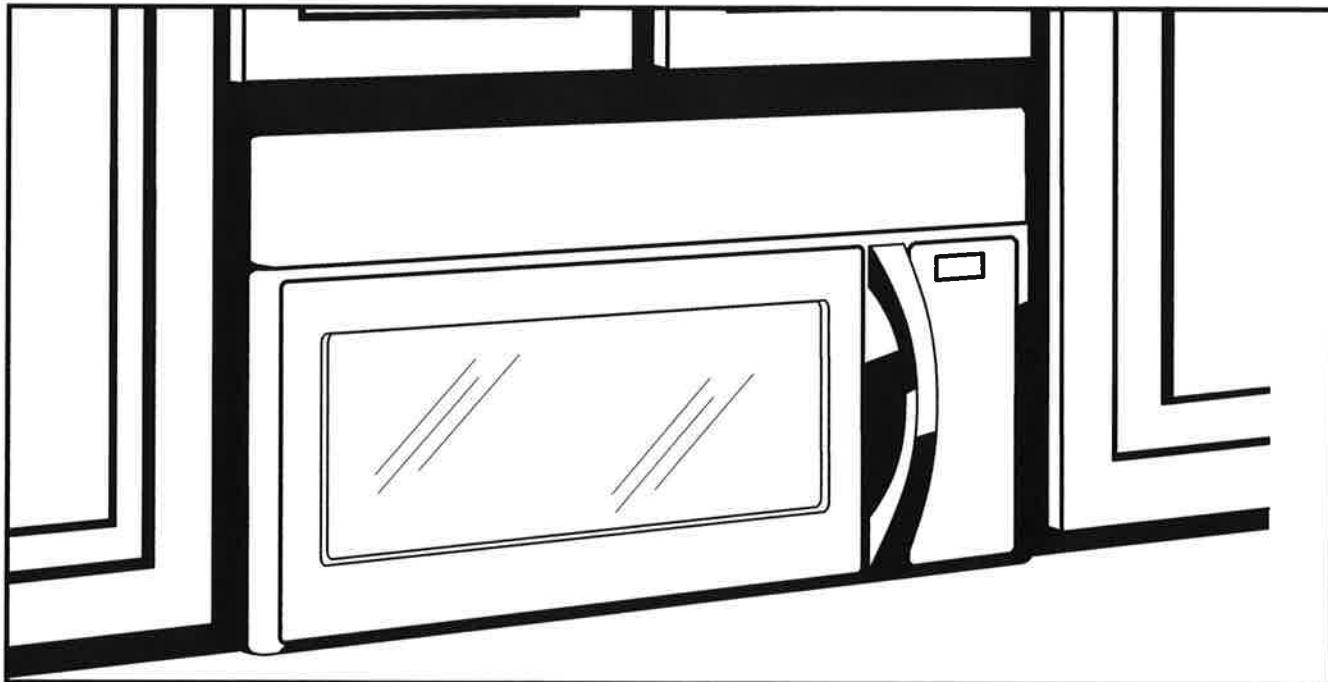
Lisez attentivement toutes ces instructions.

- **IMPORTANT** — Conservez ces instructions pour l'inspecteur local.
- **IMPORTANT** — Respectez tous les codes et règlements en vigueur.
- **Remarque destinée à l'installateur** — Assurez-vous de laisser ces instructions au consommateur.

- **Remarque destinée au consommateur** —

Conservez ces instructions pour vous y reporter ultérieurement.

- Niveau de compétence — L'installation de cet appareil nécessite des compétences de base en mécanique et en électricité.
- L'installateur est responsable de la qualité de l'installation.
- Une panne causée par une mauvaise installation n'est pas couverte par la garantie du produit.



**VEUILLEZ LIRE ATTENTIVEMENT.
CONSERVEZ CES INSTRUCTIONS.**

Instructions d'installation

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Guide d'installation étape par étape

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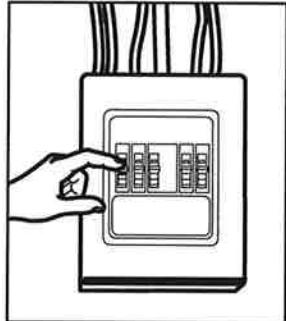
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Instructions d'installation

MESURES DE SÉCURITÉ IMPORTANTES

Ce produit nécessite une prise de courant à trois alvéoles mise à la terre. Avant d'entreprendre l'installation, l'installateur doit vérifier la continuité de la mise à la terre de la boîte de la prise de courant pour s'assurer que cette dernière est correctement mise à la terre. Si ce n'est pas le cas, ou si la boîte ne répond pas aux exigences électriques indiquées (à la section EXIGENCES ÉLECTRIQUES), il faut faire appel à un électricien qualifié pour corriger tout défaut.



ATTENTION: Pour votre sécurité, enlevez le fusible ou déclenchez le disjoncteur au panneau de distribution principal avant d'entreprendre l'installation, afin d'éviter toute blessure grave ou mortelle imputable à un choc électrique.

ATTENTION : Pour votre sécurité, la surface de montage doit être en mesure de supporter la charge des armoires, ainsi qu'un poids supplémentaire de 28,5 à 38,5 kg (63 à 85 lb) correspondant au poids du produit, et la charge du four qui peut atteindre 22,7 kg (50 lb), pour un poids total de 51,3 à 61,2 kg (113 à 135 lb).

ATTENTION : Pour votre sécurité, ce produit ne doit pas être installé avec des armoires aménagées en îlot ou en péninsule. Il doit être fixé À LA FOIS à une armoire supérieure ET à un mur.

REMARQUE : Pour faciliter l'installation et pour votre sécurité, l'installation de ce produit doit être effectuée par deux personnes.

IMPORTANT – Veuillez lire attentivement.
POUR VOTRE SÉCURITÉ, CET APPAREIL DOIT ÊTRE CORRECTEMENT MIS À LA TERRE POUR ÉVITER UN CHOC GRAVE OU MORTEL.



Pour diminuer les risques de choc électrique, le cordon d'alimentation de cet appareil est muni d'une fiche à trois broches (mise à la terre) qui correspond à une prise murale à trois alvéoles, mise à la terre.

Assurez-vous qu'une mise à la terre appropriée est en place avant toute utilisation

Demandez à un électricien qualifié de vérifier la prise murale et le circuit électrique pour vous assurer que la prise est correctement mise à la terre.

Si la prise murale est du type standard à deux alvéoles, il est très important de la faire remplacer par une prise à trois alvéoles correctement mise à la terre en vous adressant à un électricien qualifié.

NE COUPEZ, NE DÉFORMEZ ET NE RETIREZ EN AUCUN CAS UNE DES BROCHES DE LA FICHE DU CORDON D'ALIMENTATION. N'UTILISEZ PAS DE RALLONGE.

EXIGENCES ÉLECTRIQUES

Les caractéristiques nominales de ce produit sont : 120 V CA, 60 Hz, 15 A et 1,6 kW. Ce produit doit être branché à un circuit d'alimentation séparée et dédiée de tension et de fréquence appropriées. La grosseur des fils doit être conforme aux exigences du Code national d'électricité ou du code local en vigueur pour cette puissance nominale. La fiche du cordon d'alimentation doit être branchée dans une prise de courant mise à la terre, séparée et dédiée de 15 ou 20 ampères. La boîte de la prise doit être aménagée dans l'armoire située au-dessus du four à micro-ondes. La boîte de la prise et le circuit d'alimentation doivent être installés par un électricien qualifié, conformément aux normes du Code national d'électricité ou du code local en vigueur.

Instructions d'installation

DOMMAGES — EXPÉDITION/ INSTALLATION

- Si l'appareil est endommagé durant le transport, retournez-le au magasin où vous l'avez acheté pour réparation ou remplacement.
- Si l'appareil est endommagé par le client, la réparation ou le remplacement reste à la charge du client.
- Si l'appareil est endommagé par l'installateur (s'il s'agit d'une personne différente du client), la réparation ou le remplacement doivent faire l'objet d'une entente entre le client et l'installateur.

PIÈCES COMPRISES

SACHET DE QUINCAILLERIE

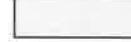
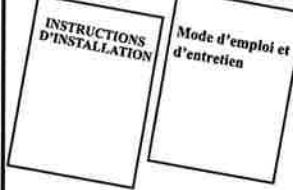
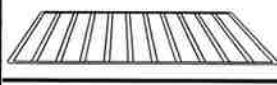
PIÈCE	QUANTITÉ
	Vis à bois (1/4 x 2 po)
	Boulons à ailettes (et écrous à oreilles) (3/16 x 3 po)
	Vis à métaux à auto-alignement (1/4 po - 28 x 3-1/4 po)
	Passe-fil en nylon (pour armoires en métal)

Vous trouverez les pièces de quincaillerie dans un sachet fourni avec l'appareil. Vérifiez que vous avez reçu toutes ces pièces.

REMARQUE: Des pièces supplémentaires sont incluses.

PIÈCES COMPRISES (SUITE)

SACHET DE QUINCAILLERIE

PIÈCE	QUANTITÉ
	Gabarit pour armoire supérieure
	Gabarit pour mur arrière combiné
	Instructions d'installation
	Mode d'emploi et d'entretien
	Filtres à graisses emballés séparément
	Adaptateur de conduit d'évacuation
	Plateau en verre
	Anneau de plateau tournant
	Trépied métallique de convection
	Etagère
	Filtre à micro-ondes PureAir ^{MD}

Instructions d'installation

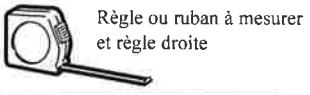
OUTILS NÉCESSAIRES



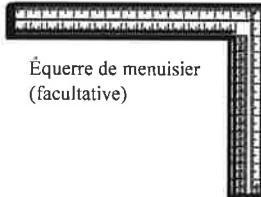
Tournevis Phillips h



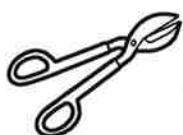
Crayon



Règle ou ruban à mesurer et règle droite



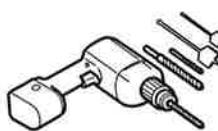
Équerre de menuisier (facultative)



Cisailles de ferblantier (pour couper le registre, si nécessaire)



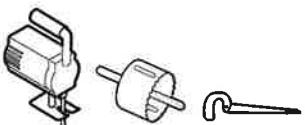
Ciseaux (pour couper le gabarit, si nécessaire)



Perceuse électrique avec forets de 3/16, 1/2 et 5/8 po



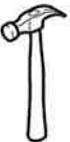
Gants



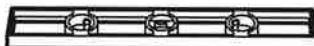
Scie (sautoise, trépan ou à guichet)



Localisateur de montant ou Marteau (facultatif)



Lunettes de sécurité



Niveau

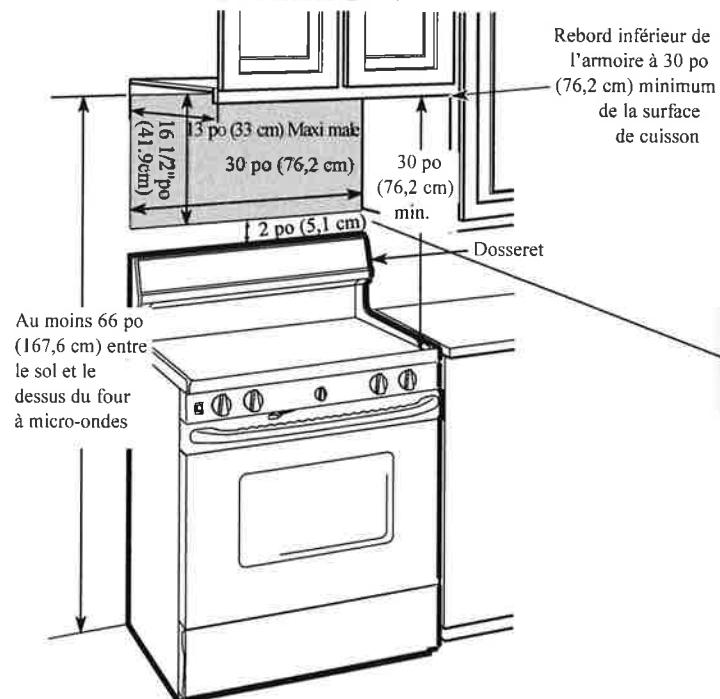


Entretubes d'assemblage ou pièces de bois de récupération, si besoin est, pour l'espacement avec l'armoire supérieure (utilisées pour l'installation sous une armoire dont le fond est doté d'un rebord)



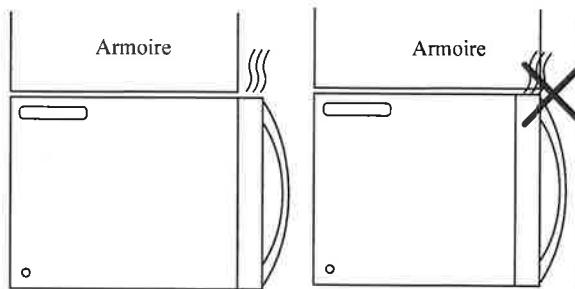
Ruban adhésif en toile et ruban-cache

DÉGAGEMENTS POUR L'INSTALLATION



REMARQUES :

- Il faut un espace d'au moins 30 po (76,2 cm) entre les armoires, sans obstructions.
- Si l'évacuation de l'air de votre four à micro-ondes s'effectue vers l'extérieur, consultez la section « Évacuation de la hotte pour la préparation du conduit d'évacuation ».
- Lorsque vous installez le four à micro-ondes sous des armoires dont le fond est lisse et plat, suivez attentivement les instructions du gabarit pour armoire supérieure concernant le dégagement du cordon d'alimentation.
- Comme un guide d'installation, voir page 24 pour l'information de gabarit montage.
- Si la profondeur de l'armoire incluant les portes de l'armoire est plus de 13 po alors l'unité doit être espacée du mur utilisant des matériaux adéquats supportant 150 lbs pour permettre une bonne ventilation d'air au sommet/admission d'air.

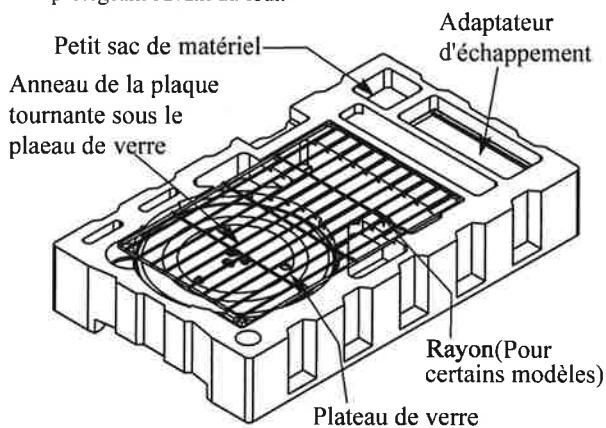


Instructions d'installation

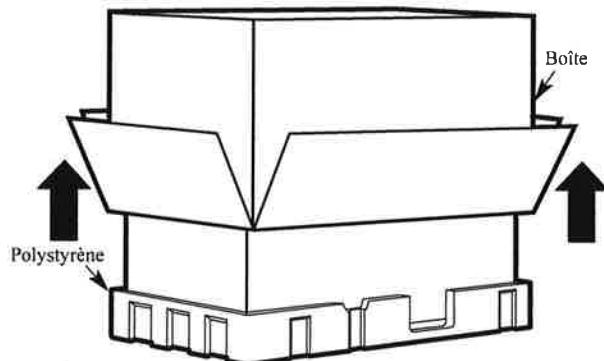
1 INSTALLATION DE LA PLAQUE DE MONTAGE

A. ENLEVER LE FOUR À MICRO-ONDES DU CARTON/ENLEVER LE PLATEAU DE MONTAGE

- 1 Enlevez les instructions de l'installation, utilisez et prenez soin, adaptateur d'échappement, anneau de la plaque tournante, rayon, filtres, plateau de verre et le petit sac de matériel. N'enlevez pas le polystyrène protégeant l'avant du four.

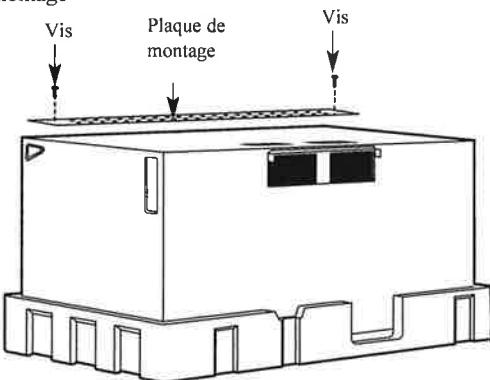


- 2 Repliez complètement les quatre rabats contre les côtés de la boîte. Ensuite, retournez le four et la boîte avec précaution. Le four devrait reposer sur le polystyrène.



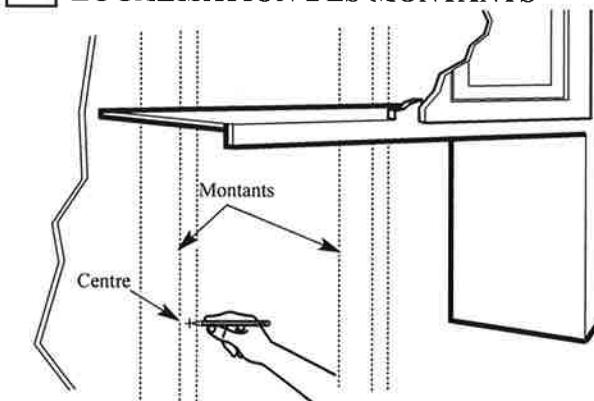
- 3 Tirez la boîte vers le haut pour dégager le four.

- 4 Coupez le centre du sac en plastique pour retirer la plaque de montage



- 5 Enlevez les vis de la plaque de montage. Cette plaque sera utilisée comme gabarit pour le mur arrière et pour le montage. Remettez en place les vis retirées préalablement.

B. LOCALISATION DES MONTANTS



- 1 Localisez les montants en utilisant une des méthodes suivantes :

- Localisateur de montant – dispositif magnétique permettant de localiser les clous.
- Utilisez un marteau pour frapper légèrement sur la surface de montage jusqu'à ce que vous n'entendiez plus un son creux. Cela signifie que vous avez trouvé un montant.

- 2 Après avoir localisé le(s) montant(s), trouvez-en le centre en sondant le mur à l'aide d'un petit clou afin de trouver les rebords du montant. Puis faites une marque à mi-chemin entre les deux bords. Le centre de tout montant adjacent doit se trouver à 16 po (40,6 cm) ou 24 po (61 cm) de cette marque.

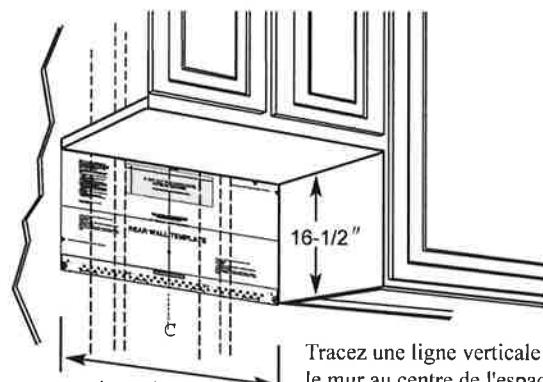
- 3 Tracez une ligne verticale marquant le milieu des montants.

LE FOUR À MICRO-ONDES DOIT ÊTRE FIXÉ À AU MOINS UN MONTANT DU MUR.

Instructions d'installation

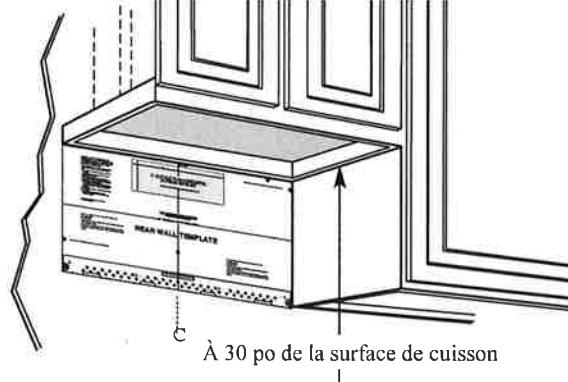
C. ÉTABLISSEMENT DE L'EMPLACEMENT DE LA PLAQUE MURALE SOUS VOTRE ARMOIRE

Emplacement de la plaque - sous une armoire à fond plat



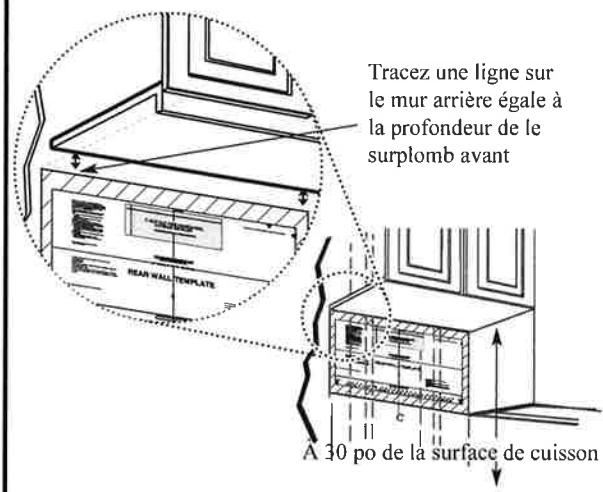
Tracez une ligne verticale sur le mur au centre de l'espace de 30 po de large.
Tape gabarit pour mur arrière sur le mur correspondant à la ligne médiane et en touchant le bas de l'armoire.

Emplacement de la plaque - sous une armoire dotée d'un rebord



Tracez une ligne verticale sur le mur au centre de l'espace de 30 po de large.
Tape gabarit pour mur arrière sur le mur correspondant à la ligne médiane et en touchant le cadre bas de l'armoire.

Emplacement de la plaque - sous une



Vos armoires peuvent être dotées de garnitures décoratives qui entravent l'installation du micro-ondes. Enlevez l'élément décoratif pour installer convenablement le four à micro-ondes et pour vous assurer qu'il est de niveau.

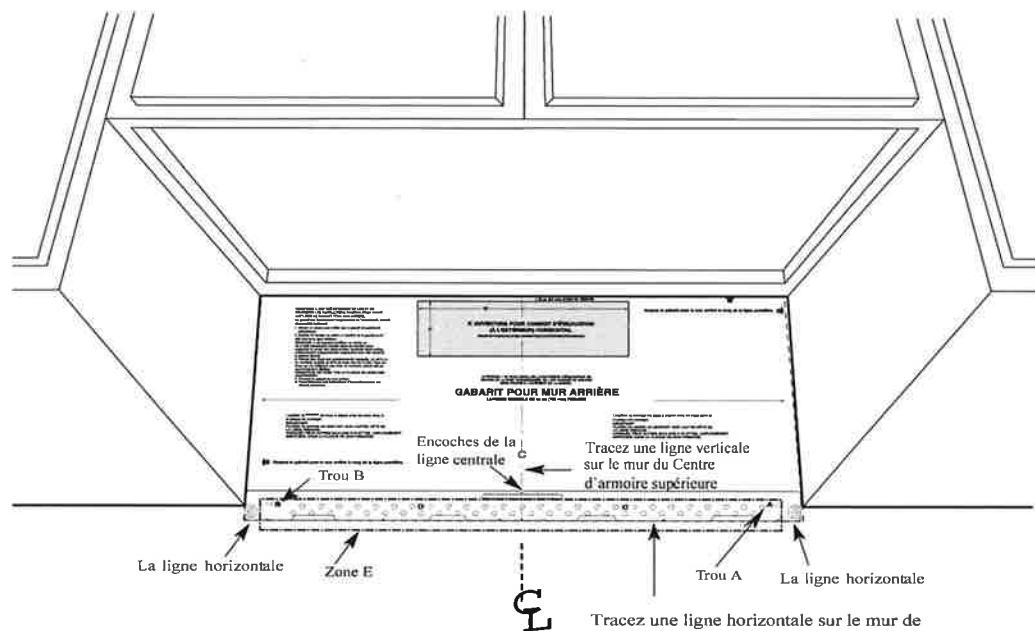
LE FOUR À MICRO-ONDES DOIT ÊTRE DE NIVEAU.
Utilisez un niveau pour vous assurer que le fond de l'armoire est de niveau.

Si les armoires sont dotées uniquement d'un rebord avant, sans rebord sur les côtés ou à l'arrière, installez la plaque de montage plus bas, à la même distance que le rebord avant de l'armoire. Ainsi, le four sera de niveau.

- 1 Mesurez la hauteur intérieure du rebord avant de l'armoire.
- 2 Tracez une ligne horizontale sous le fond de l'armoire, sur le mur arrière à une distance équivalente à la longueur intérieure du rebord avant de l'armoire.
- 3 Pour l'installation sous une armoire dotée d'un rebord avant uniquement, alignez les languettes de montage sur cette ligne horizontale, sans qu'elles touchent le fond de l'armoire, tel que décrit à l'étape D.

Instructions d'installation

D. ALIGNEMENT DE LA PLAQUE MURALE



ATTENTION : Portez des gants pour éviter de vous blesser sur les bords coupants.

- 1** Tracez une ligne verticale sur le mur au centre de l'espace de 30 po de large.
- 2** Tracez une ligne horizontale sur le mur de fond de "Gabarit pour mur arrière".
- 3** Trouvez un clou du mur dans la zone "E" du plateau de montage, référez-vous à la section 1B. Trouver les clous du mur.
- 4** Pour attacher le plateau du montage dans le clou forez un trou de 3/16 po dans le clou en bois. Forez un trou de 5/8 po pour le verrou d'interrupteur à bascules dans un autre emplacement (Trou A ou Trou B).

REMARQUE : NE FIXEZ PAS LA PLAQUE DE MONTAGE MAINTENANT.

REMARQUE: Les trous A et B sont à l'intérieur de la zone E. Si aucun des trous A et B ne se trouve dans un montant, trouvez un montant dans la zone E et tracez un cinquième cercle pour l'aligner sur un montant. Il est important **qu'au moins une vis à bois soit fixée solidement dans un montant** pour soutenir le poids du four à microondes. **Mettez la plaque de montage de côté.**

Instructions d'installation

2 TYPES D'INSTALLATION (Choisissez A, B ou C)

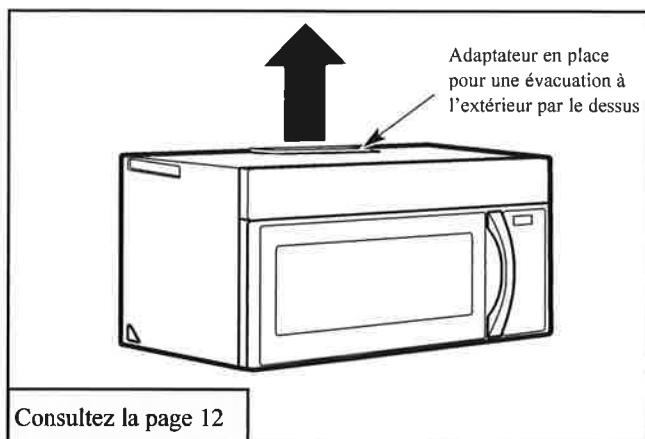
Ce four à micro-ondes est conçu pour s'adapter aux trois types d'évacuation suivants :

- A. Évacuation à l'extérieur par le dessus (conduit vertical)
- B. Évacuation à l'extérieur par l'arrière (conduit horizontal)
- C. Recyclage (sans conduit)

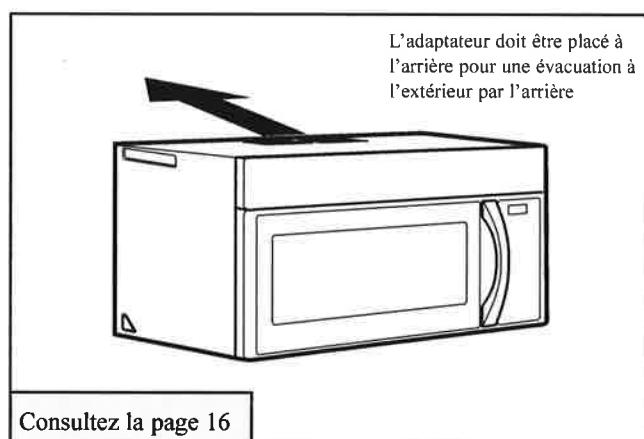
REMARQUE: Ce four à micro-ondes est équipé à l'usine en vue d'une Recyclage .

Choisissez le type d'évacuation approprié à votre installation et rendez-vous à cette section.

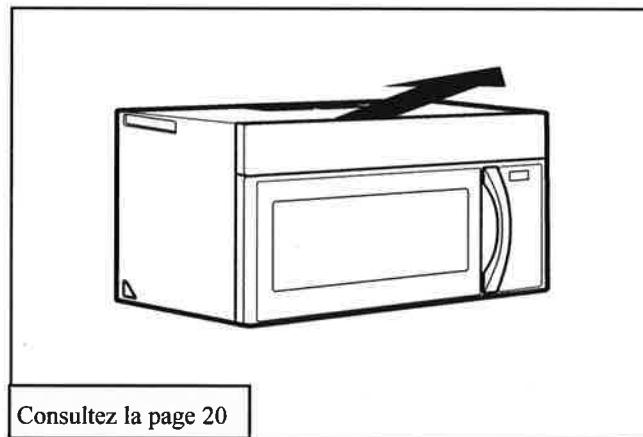
A ÉVACUATION À L'EXTÉRIEUR PAR LE DESSUS (CONDUIT VERTICAL)



B ÉVACUATION À L'EXTÉRIEUR PAR L'ARRIÈRE (CONDUIT HORIZONTAL)



C RECYCLAGE D'AIR (ÉVACUATION SANS CONDUIT)



Sur les modèles conçus pour le recyclage d'air, un filtre à charbon jetable est installé en usine pour retenir la fumée et les odeurs.

REMARQUE: Ne lisez les deux pages suivantes que si vous décidez d'évacuer l'air du ventilateur à l'extérieur. Si vous décidez de recycler l'air dans la pièce, rendez-vous à la page 20.

Instructions d'installation

INSTRUCTIONS POUR L'INSTALLATION EXTERIEURE DE CODUITS D'ECHAPPEMENT.

REMARQUE : Si vous devez installer des conduits, notez que la longueur totale du conduit rectangulaire de 3-1/4 po x 10 po (8,2 x 25,4 cm) ou du conduit rond de 5 po (12,7cm)/6 po (15,2 cm) de diamètre **ne doit pas être supérieure à 120 pi (36,5m) de longueur équivalente.**

L'évacuation vers l'extérieur requiert un CONDUIT D'ÉVACUATION POUR HOTTE. Lisez attentivement ce qui suit.

REMARQUE: Il est important que l'évacuation soit installée en utilisant le chemin le plus direct et avec le moins de coudes possible. Cela assure une bonne évacuation et aide à prévenir les blocages. **Assurez-vous également que les registres bougent librement et que rien ne bloque les conduits.**

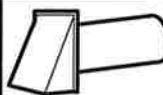
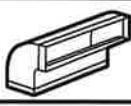
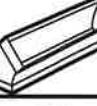
Connexion d'échappement:

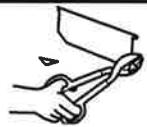
L'adaptateur d'échappement a été conçu pour s'accoupler avec une canalisation rectangulaire standard de 3 1/4 x 10 po (8.2 x 25,4 cm). Si une canalisation ronde est requise, un adaptateur de transition rectangulaire-rond doit être utilisé. **Une canalisation de diamètre 5 po (12,7cm) / 6 po (15,2cm) est acceptable à utiliser.**

Longueur maximale du conduit:

Pour une circulation d'air satisfaisante, la longueur totale du conduit rectangulaire de 3-1/4 x 10 po (8,2 x 25,4 cm) ou du conduit rond de 5 po (12,7cm) / 6 po (15,2 cm) de diamètre **ne doit pas excéder une longueur équivalente à 120 pi (36,5m)**

Les coudes, adaptateurs de transition, évents muraux ou de toiture, etc. offrent une résistance supplémentaire à la circulation de l'air et sont équivalents à une section de conduit droit plus longue que leur dimension réelle. Lorsque vous calculez la longueur totale du conduit, ajoutez les longueurs équivalentes de tous les adaptateurs de transition et des coudes, ainsi que la longueur de toutes les sections de conduit droit. Vous trouverez dans le tableau ci-dessous la longueur équivalente approximative en pieds et en mètres de certains types de conduits.

PIÈCES DE CONDUIT	LONGUEUR ÉQUIVALENTE	x	NOMBRE UTILISÉ	=	LONGUEUR ÉQUIVALENTE	
	Adaptateur de transition*	5 pi (1,5 m)	x	()	=	pi ou m
	Évent mural	40 pi (12,2 m)	x	()	=	pi ou m
	Coude de 90°	10 pi (3 m)	x	()	=	pi ou m
	Coude de 45°	5 pi (1,5 m)	x	()	=	pi ou m
	Coude de 90°	25 pi (7,6 m)	x	()	=	pi ou m
	Coude de 45°	5 pi (1,5 m)	x	()	=	pi ou m
	Évent de toiture	24 pi (7,3 m)	x	()	=	pi ou m
	Conduit droit rond de 6 po (15,2 cm) ou rectangulaire de 3-1/4 x 10 po (8,2 x 25,4 cm)	1 pi (0,3 m)	x	()	=	pi ou m
Longueur totale				=	pi ou m	



*** IMPORTANT:** Si vous utilisez un adaptateur de transition, il faudra couper les coins inférieurs du registre aux dimensions de l'adaptateur à l'aide de cisailles pour que le registre puisse bouger.

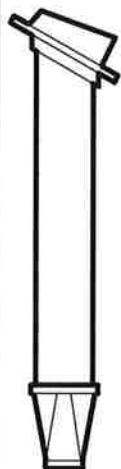
Les longueurs équivalentes des pièces de conduits sont basées sur des essais réels et représentent les longueurs nécessaires à une bonne ventilation pour n'importe quelle hotte.

Instructions d'installation

CANALISATION D'ECHAPPEMENT EXTERNE

ÉVACUATION À L'EXTÉRIEUR PAR LE DESSUS (EXEMPLE SEULEMENT)

Le tableau suivant décrit un exemple d'installation de conduit.

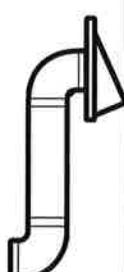


PIÈCES DE CONDUIT	LONGUEUR ÉQUIVALENTE	x	NOMBRE UTILISÉ	=	LONGUEUR ÉQUIVALENTE
	Évent de toiture	24 pi (7,3 m)	x (1)	=	24 pi (7,3 m)
	Conduit droit de 12 pi (3,6 m) (rond de 6 po/15,2 cm)	12 pi (3,6 m)	x (1)	=	12 pi (3,6 m)
	Adaptateur de transition*	5 pi (1,5 m)	x (1)	=	5 pi (1,5 m)
Les longueurs équivalentes des pièces de conduits sont basées sur des essais réels et représentent les longueurs nécessaires à une bonne ventilation pour n'importe quelle hotte.				Longueur totale =	41 pi (12,5 m)

* IMPORTANT: Si vous utilisez un adaptateur de transition, il faudra couper les coins inférieurs du registre aux dimensions de l'adaptateur à l'aide de cisailles pour que le registre puisse bouger.

ÉVACUATION À L'EXTÉRIEUR PAR L'ARRIÈRE (EXEMPLE SEULEMENT)

Le tableau suivant décrit un exemple d'installation de conduit.



PIÈCES DE CONDUIT	LONGUEUR ÉQUIVALENTE	x	NOMBRE UTILISÉ	=	LONGUEUR ÉQUIVALENTE
	Évent mural	40 pi (12,2 m)	x (1)	=	40 pi (12,2 m)
	Conduit droit de 3 pi (0,91 m) (rectangulaire 1/4 x 10 po/ 8,2 x 25,4 cm)	3 pi (0,9 m)	x (1)	=	3 pi (0,9 m)
	Coude de 90°	10 pi (3 m)	x (2)	=	20 pi (6 m)
Les longueurs équivalentes des pièces de conduits sont basées sur des essais réels et représentent les longueurs nécessaires à une bonne ventilation pour n'importe quelle hotte.				Longueur totale =	63 pi (19,2 m)

REMARQUE : Dans le cas d'une évacuation par l'arrière, veillez à aligner le conduit d'évacuation sur les espaces entre les montants, ou à préparer le mur au moment de la construction en laissant assez d'espace entre les montants pour recevoir le conduit.

Instructions d'installation

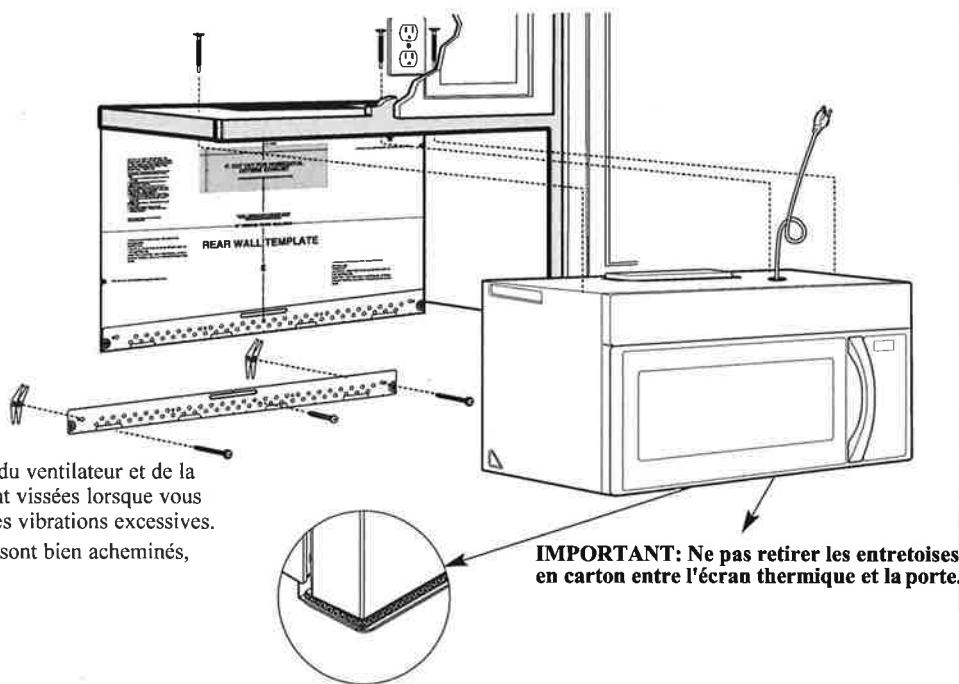
A ÉVACUATION À L'EXTÉRIEUR PAR LE DESSUS (Conduit vertical)

VUE D'ENSEMBLE DE L'INSTALLATION

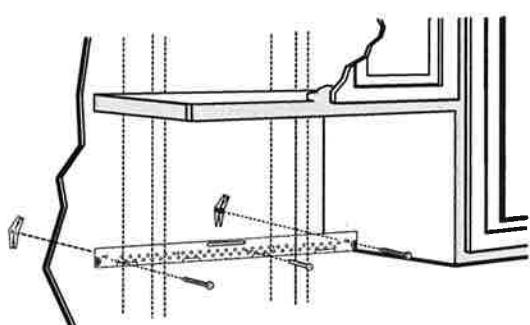
- A1. Fixation de la plaque de montage au mur
- A2. Préparation de l'armoire supérieure
- A3. Ajustement du ventilateur
- A4. Vérification du fonctionnement du registre
- A5. Installation du four à micro-ondes
- A6. Ajustement de l'adaptateur d'évacuation
- A7. Connexion au conduit

REMARQUES IMPORTANTES :

- Assurez-vous que les vis du moteur du ventilateur et de la plaque du ventilateur sont solidement vissées lorsque vous les remettez en place. Cela évitera les vibrations excessives.
- Assurez-vous que les fils du moteur sont bien acheminés, fixés et qu'ils ne sont pas coincés.



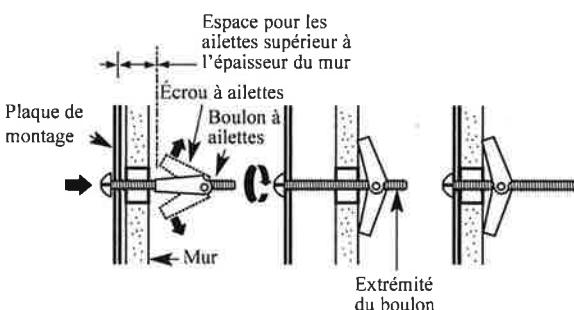
A1. FIXATION DE LA PLAQUE DE MONTAGE AU MUR



Fixez la plaque au mur à l'aide des boulons à ailettes. Vous devez utiliser au moins une vis à bois pour fixer la plaque à un montant.

- 1 Enlevez les écrous à ailettes des boulons.
- 2 Insérez les boulons dans la plaque de montage à travers les trous dans le gypse et réassembliez les écrous à ailettes, à 3/4 po (19 mm) sur chaque boulon.

Pour utiliser les boulons à ailettes :



- 3 Placez la plaque de montage contre le mur et insérez les écrous à ailettes dans les trous du mur pour fixer la plaque.

REMARQUE: Avant de resserrer les boulons à ailettes et la vis à bois, assurez-vous que la plaque est bien centrée sous l'armoire et que les languettes de la plaque de montage touchent le dessous de l'armoire lorsque vous poussez la plaque contre le mur.

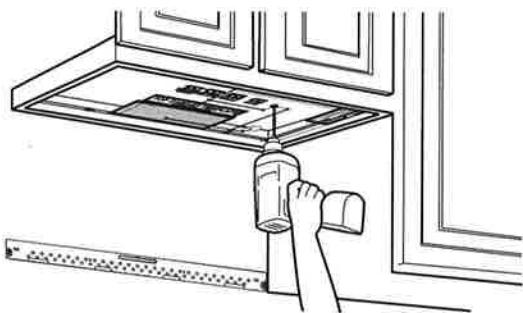
ATTENTION: Faites attention de ne pas vous pincer les doigts entre l'arrière de la plaque de montage et le mur.

- 4 Serrez tous les boulons. Tirez sur la plaque pour faciliter le serrage des boulons.

Instructions d'installation

A2. UTILISATION DU GABARIT POUR ARMOIRE SUPÉRIEURE POUR LA PRÉPARATION DE L'ARMOIRE SUPÉRIEURE

Vous devez percer des trous pour les vis de soutien supérieures, ainsi qu'un trou suffisamment grand pour y faire passer le cordon d'alimentation et une ouverture assez grande pour l'adaptateur d'évacuation.

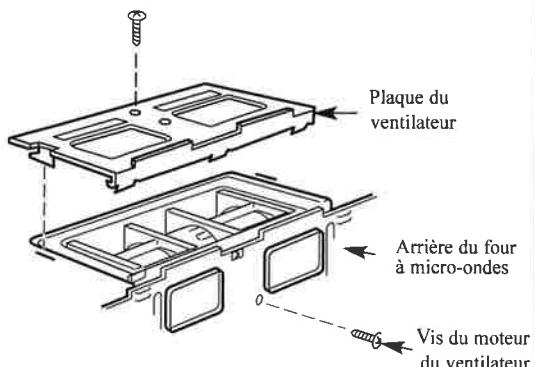


- Lisez les instructions sur le GABARIT POUR ARMOIRE SUPÉRIEURE.
- Collez-le sous l'armoire supérieure à l'aide de ruban adhésif.
- Percez les trous, en suivant les directives du GABARIT POUR ARMOIRE SUPÉRIEURE.

ATTENTION: Portez des lunettes de sécurité lorsque vous percez des trous dans le fond de l'armoire.

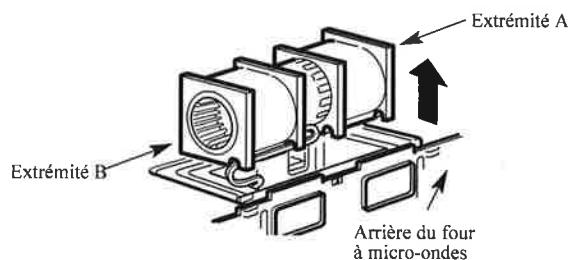
A3. ADAPTATION DU VENTILATEUR DU FOUR À MICRO-ONDES POUR L'ÉVACUATION À L'EXTÉRIEUR PAR LE DESSUS

- 1 Enlevez et conservez la vis qui retient le moteur du ventilateur au four à micro-ondes.

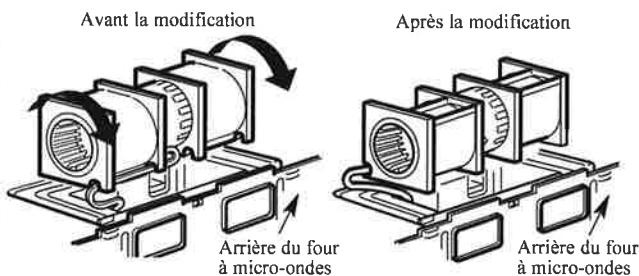


Enlevez la vis qui retient la plaque du ventilateur sur le four à micro-ondes. Enlevez et conservez la vis qui retient le moteur du ventilateur sur le four à micro-ondes.

- 2 Enlevez délicatement l'ensemble du ventilateur. Les fils seront assez longs pour vous permettre d'adapter le ventilateur.

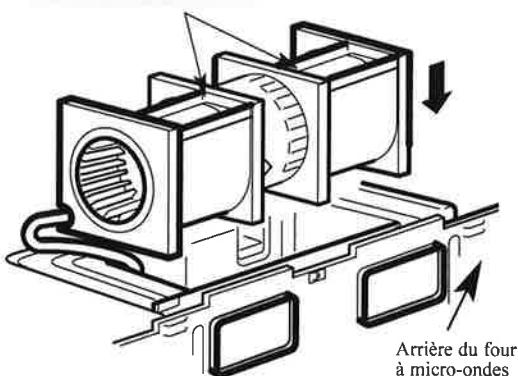


- 3 Tournez le moteur de 90° afin que les ouvertures des pales du ventilateur orientées vers le haut.



- 4 Replacez l'ensemble du ventilateur dans l'ouverture.

APRÈS : Ouvertures des pales du ventilateur orientées vers le haut

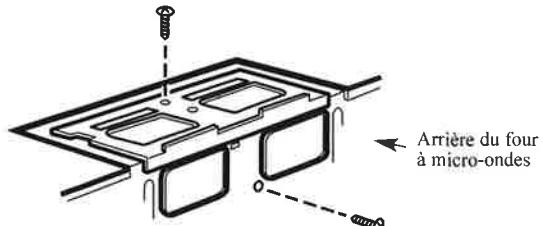


ATTENTION : Ne tirez pas sur les fils de l'ensemble du ventilateur et ne les étirez pas. Assurez-vous que les fils ne sont pas coincés et qu'il sont fixés solidement.

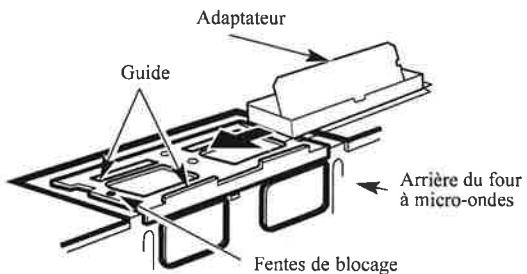
Instructions d'installation

A3. ADAPTATION DU VENTILATEUR DU FOUR À MICRO-ONDES POUR L'ÉVACUATION À L'EXTERIEUR PAR LE DESSUS

- 5 Fixez l'ensemble de ventilateur au four à micro-ondes en utilisant la vis de l'étape 1. Assurez-vous que la vis est bien serrée.
- 6 Replacez la plaque du ventilateur en utilisant la vis de l'étape 1. Assurez-vous que la vis est bien serrée.

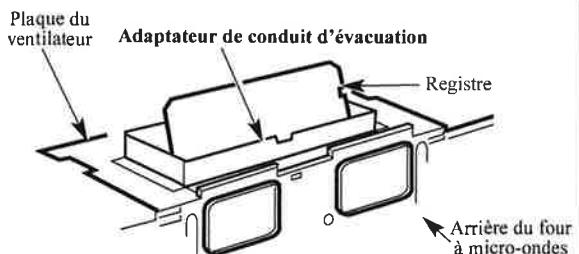


- 7 Fixez l'adaptateur d'évacuation en haut du plaque du ventilateur en le coulissant dans les guides situés, à la partie supérieure arrière du plaque du ventilateur.



Insérez-le jusqu'à ce qu'il soit dans les fentes de blocage inférieures. Assurez-vous que la charnière du registre est installée et que le registre bouge librement.

A4. VÉRIFICATION DU FONCTIONNEMENT DU REGISTRE



- Assurez-vous que le ruban adhésif qui retient le registre a été enlevé et que le registre bouge librement avant d'installer le four.
- Vous devrez effectuer les ajustements nécessaires pour vous assurer que le conduit du four est bien aligné sur le conduit d'évacuation du domicile après l'installation du four.

A5. INSTALLATION DU FOUR À MICRO-ONDES



POUR VOTRE SÉCURITÉ ET POUR FACILITER L'INSTALLATION, L'INSTALLATION DE CE FOUR DOIT ÊTRE EFFECTUÉE PAR DEUX PERSONNES

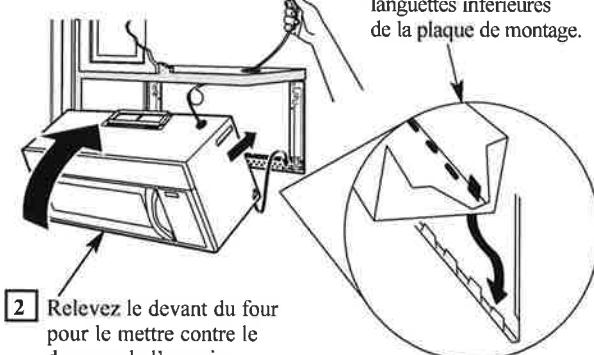
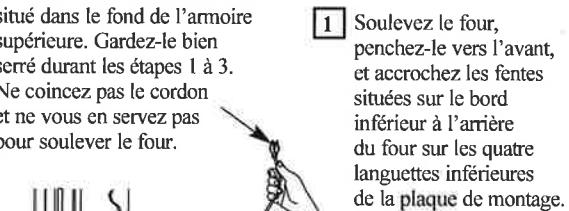
IMPORTANT: Ne pas saisir ou utiliser la poignée ou l'écran thermique durant l'installation. Ne pas retirer les entretoises en carton entre l'écran thermique et la porte.

REMARQUE: Si vos armoires sont en métal, installez un passe-fil en nylon autour de l'orifice du cordon d'alimentation pour empêcher que le cordon soit coupé.

REMARQUE: Si le four est installé sous une armoire dotée d'un rebord avant, nous vous recommandons d'utiliser des entretoises.

IMPORTANT : Si vous n'utilisez pas d'entretoises, des dommages peuvent être causés au boîtier au moment du resserrage des vis.

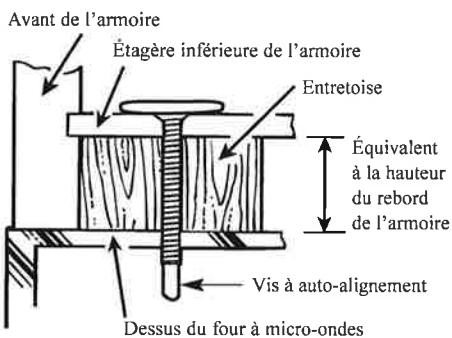
REMARQUE: Lors de l'installation du four à micro-ondes, faites passer le cordon d'alimentation à travers le trou situé dans le fond de l'armoire supérieure. Gardez-le bien serré durant les étapes 1 à 3. Ne coincez pas le cordon et ne vous en servez pas pour soulever le four.



- 1 Soulevez le four, penchez-le vers l'avant, et accrochez les fentes situées sur le bord inférieur à l'arrière du four sur les quatre languettes inférieures de la plaque de montage.
- 2 Relevez le devant du four pour le mettre contre le dessous de l'armoire.
- 3 Insérez une vis à auto-alignement dans le trou situé au centre de l'armoire supérieure. Fixez temporairement le four en faisant faire au moins **deux tours complets** à la vis après que les filets aient été engagés. (Elle sera complètement resserrée plus tard.) **Assurez-vous que le cordon d'alimentation est bien serré.** Faites attention de ne pas le coincer, particulièrement au moment d'installer le four sous l'armoire.

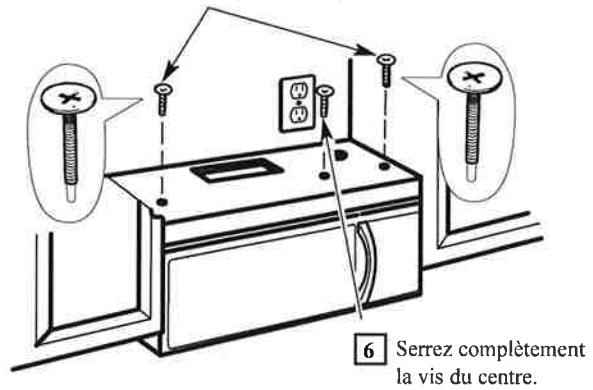
Instructions d'installation

A5. INSTALLATION DU FOUR À MICRO-ONDES (suite)

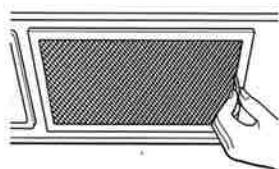


4 Fixez le four à micro-ondes à l'armoire supérieure.

5 Insérez deux vis à auto-alignement à travers les trous de l'armoire supérieure. Faites faire deux tours complets à chaque vis.



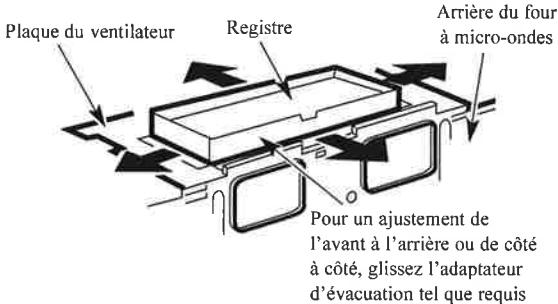
7 Serrez les deux vis de chaque côté dans le dessus du four à micro-ondes. (Tout en serrant les vis, soulevez l'avant du four à micro-ondes et poussez-le contre le mur et l'armoire supérieure.)



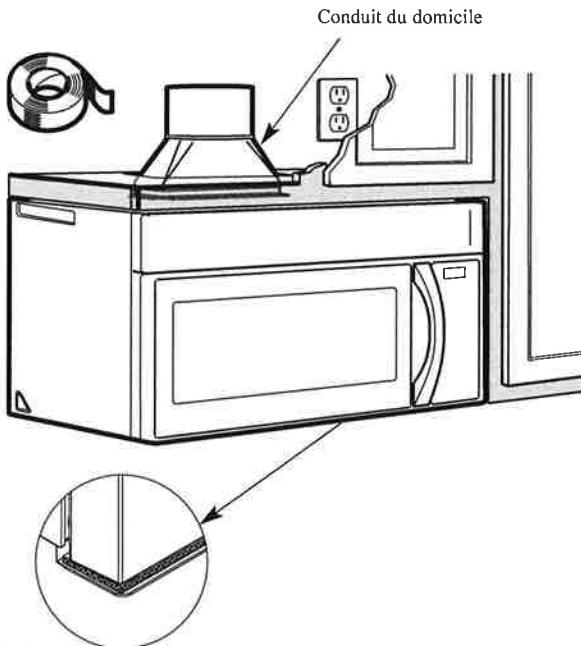
8 Installez les filtres. Consultez le Manuel de l'utilisateur emballé avec le four.

A6. AJUSTEMENT DE L'ADAPTATEUR D'ÉVACUATION

Ouvrez l'armoire supérieure et ajustez l'adaptateur d'évacuation pour le relier au conduit d'évacuation du domicile.



A7. CONNEXION AU CONDUIT



- 1 Tirez sur le conduit du domicile pour le raccorder à l'adaptateur d'évacuation.
- 2 Scellez les joints du conduit d'évacuation à l'aide de ruban adhésif en toile convenant à des températures élevées.

IMPORTANT: Retirer les entretoises en carton entre l'écran thermique et la porte.

Instructions d'installation

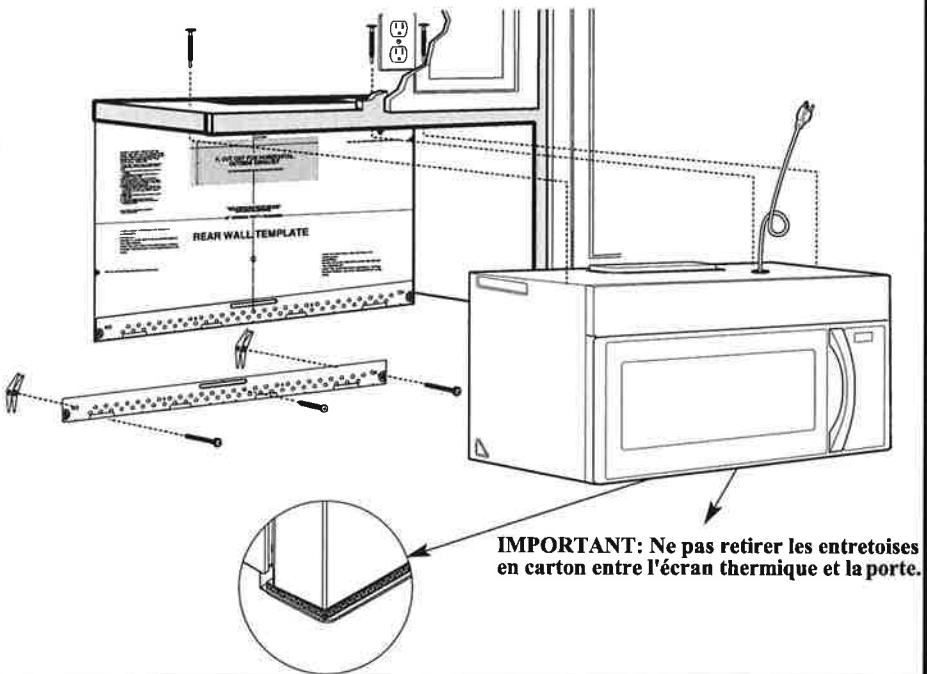
B ÉVACUATION À L'EXTÉRIEUR PAR L'ARRIÈRE (Conduit horizontal)

VUE D'ENSEMBLE DE L'INSTALLATION

- B1. Préparation du mur arrière
- B2. Enlèvement de la plaque du ventilateur
- B3. Fixation de la plaque de montage au mur
- B4. Préparation de l'armoire supérieure
- B5. Ajustement du ventilateur
- B6. Installation du four à micro-ondes

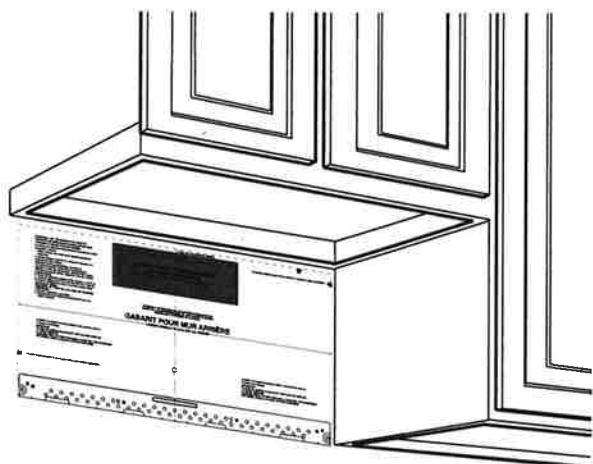
REMARQUES IMPORTANTES :

- Assurez-vous que les vis du moteur du ventilateur et de la plaque du ventilateur sont solidement vissées lorsque vous les remettez en place. Cela évitera les vibrations excessives.
- Assurez-vous que les fils du moteur sont bien acheminés, fixés et qu'ils ne sont pas coincés.



B1. PRÉPARATION DU MUR ARRIÈRE POUR L'ÉVACUATION À L'EXTÉRIEUR PAR L'ARRIÈRE

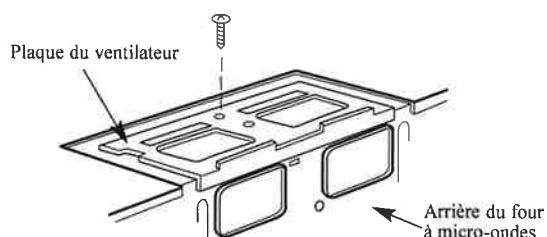
Vous devez percer une ouverture dans le mur arrière pour l'évacuation à l'extérieur.



- Lisez les instructions figurant sur le GABARIT POUR MUR ARRIÈRE.
- Collez-le au mur arrière.
- Percez l'ouverture en suivant les instructions sur le GABARIT POUR MUR ARRIÈRE.

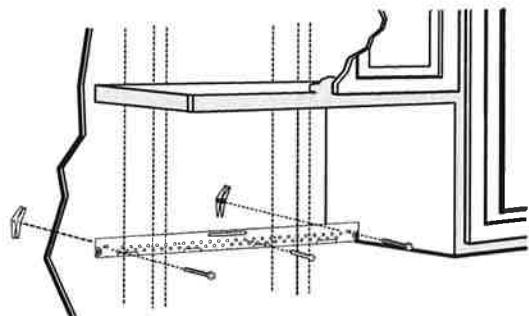
B2. ENLÈVEMENT DE L'PLAQUE DU VENTILATEUR

Enlevez et conservez la vis qui retient la plaque du ventilateur au four à micro-ondes. Soulevez la plaque du ventilateur.



Instructions d'installation

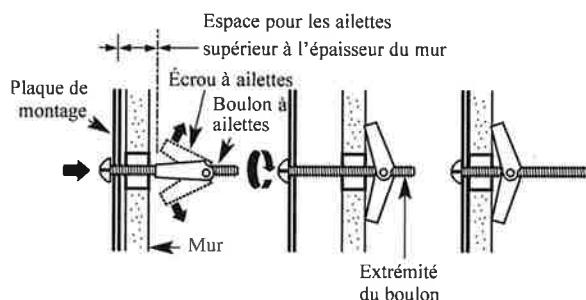
B3. FIXATION DE LA PLAQUE DE MONTAGE AU MUR



Fixez la plaque au mur à l'aide des boulons à ailettes. Vous devez utiliser au moins une vis à bois pour fixer la plaque à un montant.

- 1 Enlevez les écrous à ailettes des boulons.
- 2 Insérez les boulons dans la plaque de montage à travers les trous dans le gypse et réassembliez les écrous à ailettes, à 3/4 po (19 mm) sur chaque boulon.

Pour utiliser les boulons à ailettes :



- 3 Placez la plaque de montage contre le mur et insérez les écrous à ailettes dans les trous du mur pour fixer la plaque.

REMARQUE: Avant de resserrer les boulons à ailettes et la vis à bois, assurez-vous que la plaque est bien centrée sous l'armoire et que les languettes de la plaque de montage touchent le dessous de l'armoire lorsque vous poussez la plaque contre le mur.

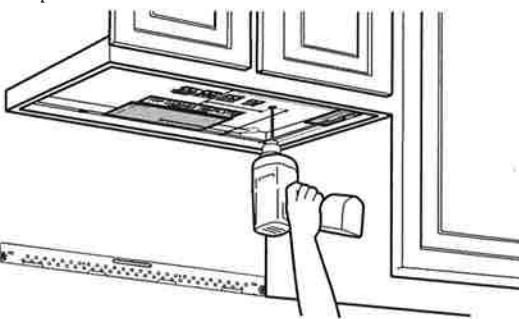
ATTENTION: Faites attention de ne pas vous pincer les doigts entre l'arrière de la plaque de montage et le mur.

- 4 Serrez tous les boulons. Tirez sur la plaque pour faciliter le serrage des boulons.

B4. UTILISATION DU GABARIT POUR ARMOIRE SUPÉRIEURE POUR LA PRÉPARATION DE L'ARMOIRE SUPÉRIEURE

Vous devez percer des trous pour les vis de soutien supérieures, ainsi qu'un trou suffisamment grand pour y faire passer le cordon d'alimentation.

Vous devez percer des trous pour les vis de soutien supérieures, ainsi qu'un trou suffisamment grand pour y faire passer le cordon d'alimentation.

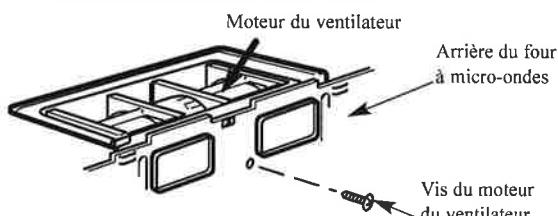


- Lisez les instructions sur le GABARIT POUR ARMOIRE SUPÉRIEURE.
- Collez-le sous l'armoire supérieure à l'aide de ruban adhésif.
- Percez les trous, en suivant les directives du GABARIT POUR ARMOIRE SUPÉRIEURE.

ATTENTION: Portez des lunettes de sécurité lorsque vous percez des trous dans le fond de l'armoire.

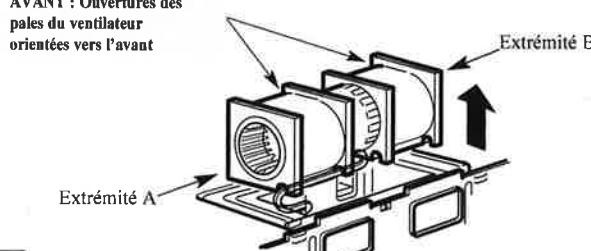
B5. ADAPTATION DU VENTILATEUR DU FOUR À MICRO-ONDES POUR L'ÉVACUATION À L'EXTÉRIEUR PAR L'ARRIÈRE

- 1 Enlevez et conservez la vis qui retient le moteur du ventilateur au four à micro-ondes.

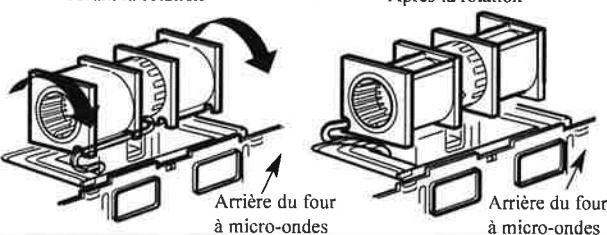


- 2 Enlevez délicatement l'ensemble du ventilateur. Les fils seront assez longs pour vous permettre d'ajuster la position du ventilateur.

AVANT : Ouvertures des pales du ventilateur orientées vers l'avant



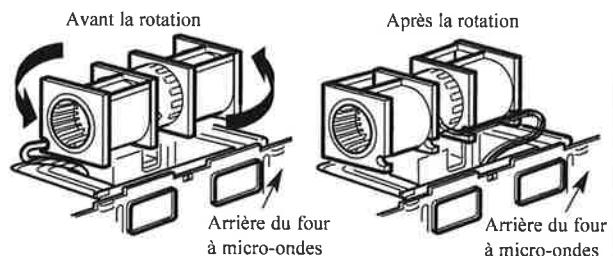
- 3 Tournez le moteur de 90°.
Avant la rotation Après la rotation



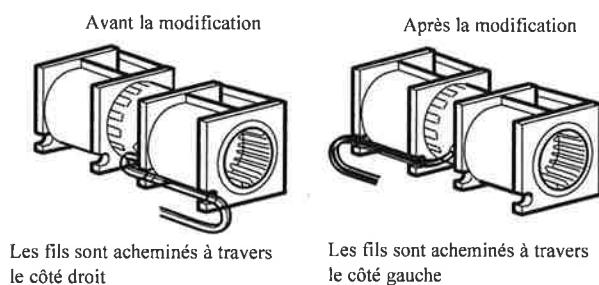
Instructions d'installation

B5. ADAPTATION DU VENTILATEUR DU FOUR À MICRO-ONDES POUR L'ÉVACUATION À L'EXTÉRIEUR PAR L'ARRIÈRE (suite)

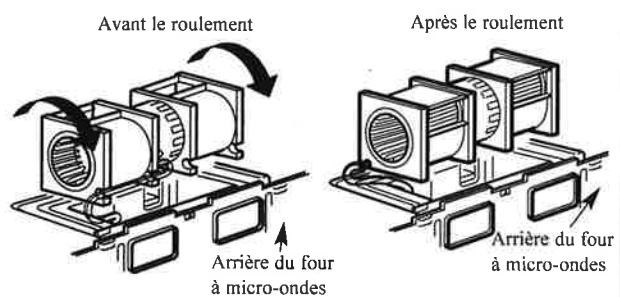
- 4 Retournez l'ensemble du ventilateur dans le sens contraire des aiguilles d'une montre, sur 180°.



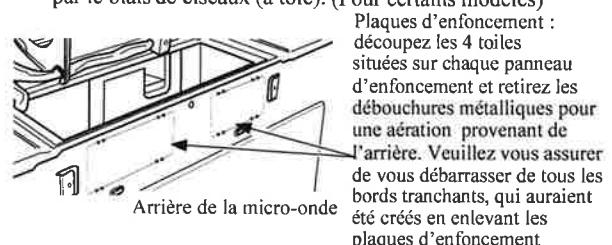
- 5 Enlevez délicatement les fils des encoches. Replacez les fils dans les encoches de l'autre côté de l'ensemble du ventilateur.



- 6 Tournez le moteur de 90° afin que les ouvertures des pales du ventilateur soient orientées vers l'arrière du four à micro-ondes.

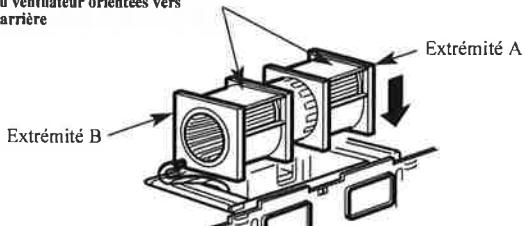


- 7 Retirez les plaques d'enfoncement à l'arrière de l'appareil par le biais de ciseaux (à tôle). (Pour certains modèles)



- 8 Replacez l'ensemble du ventilateur dans l'ouverture.

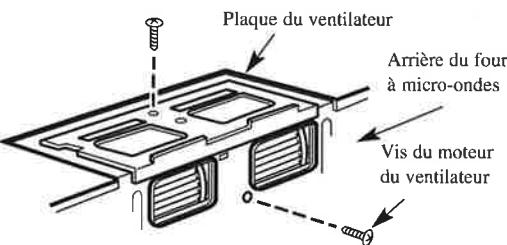
APRÈS : Ouvertures des pales du ventilateur orientées vers l'arrière



ATTENTION : Ne tirez pas sur les fils de l'ensemble du ventilateur et ne les étirez pas. Assurez-vous que les fils ne sont pas coincés et qu'il sont fixés solidement.

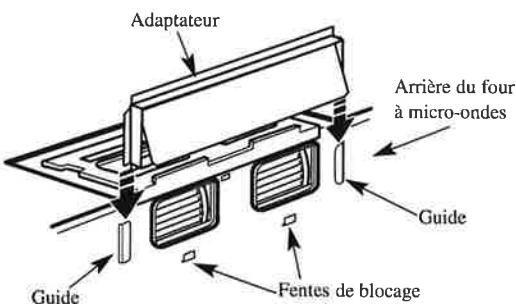
REMARQUE : Les ouvertures de l'ensemble du ventilateur doivent correspondre aux ouvertures de ventilation à l'arrière du four à micro-ondes.

- 9 Fixez l'ensemble de ventilateur au four à micro-ondes en utilisant la vis d'origine.



- 10 Replacez la plaque du ventilateur au même endroit qu'avant avec la vis. Assurez-vous que la vis est bien serrée.

- 11 Fixez l'adaptateur d'évacuation à l'arrière du four en le coulissant dans les guides situés au centre, à la partie supérieure arrière du four.



Insérez-le jusqu'à ce qu'il soit dans les fentes de blocage inférieures. Assurez-vous que la charnière du registre est installée sur le dessus et que le registre bouge librement.

Instructions d'installation

B6. INSTALLATION DU FOUR À MICRO-ONDES



POUR VOTRE SÉCURITÉ ET POUR FACILITER
L'INSTALLATION, L'INSTALLATION DE CE FOUR
DOIT ÊTRE EFFECTUÉE PAR DEUX PERSONNES.

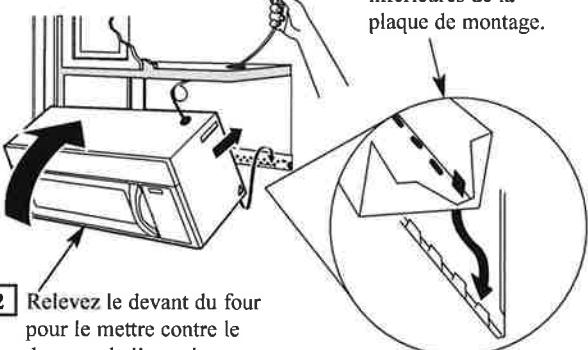
IMPORTANT: Ne pas saisir ou utiliser la poignée ou
l'écran thermique durant l'installation. Ne pas retirer les
entretoises en carton entre l'écran thermique et la porte.

REMARQUE: Si vos armoires sont en métal, installez un
passe-fil en nylon autour de l'orifice du cordon
d'alimentation pour empêcher que le cordon soit coupé.

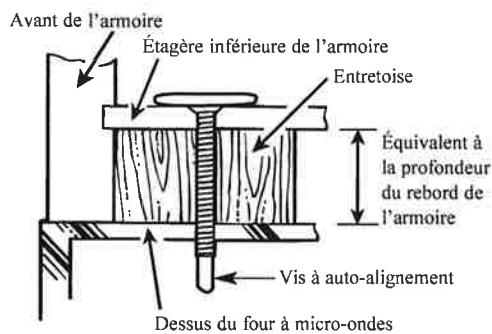
REMARQUE: Si le four est installé sous une armoire dotée
d'un rebord avant, nous vous recommandons d'utiliser des
entretoises.

IMPORTANT: Si vous n'utilisez pas
d'entretoises, des dommages peuvent être causés
au boîtier au moment de resserrer les vis.

REMARQUE: Lors de
l'installation du four à micro-ondes, faites passer le cordon
d'alimentation à travers le trou
situé dans le fond de l'armoire
supérieure. Gardez-le bien
serré durant les étapes 1 à 3.
Ne coincez pas le cordon ou
ne soulevez pas le four
en tirant sur le cordon.

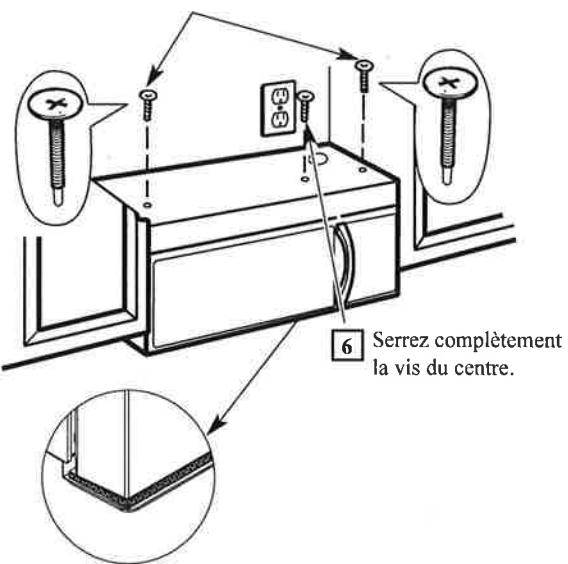


3 Insérez une vis à auto-alignement dans le trou situé au
centre de l'armoire supérieure. Fixez temporairement
le four en faisant faire au moins **deux tours complets**
à la vis après que les filets aient été engagés. (Elle sera
complètement resserrée plus tard.) **Assurez-vous que**
le cordon d'alimentation est bien serré. Faites
attention de ne pas le coincer, particulièrement au
moment d'installer le four sous l'armoire.

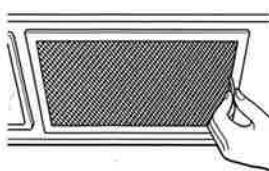


4 Fixez le four à micro-ondes à l'armoire supérieure.

5 Insérez deux vis à auto-alignement
à travers les trous de l'armoire
supérieure. Faites faire deux tours
complets à chaque vis.



7 Serrez les deux vis de chaque côté dans le dessus du
four à micro-ondes. (Tout en serrant les vis, soulevez
l'avant du four à micro-ondes et poussez-le contre le
mur et l'armoire supérieure.)



8 Installez les filtres. Consultez le Manuel de l'utilisateur
emballé avec le four.

IMPORTANT: Retirer les entretoises en carton entre l'écran
thermique et la porte.

Instructions d'installation

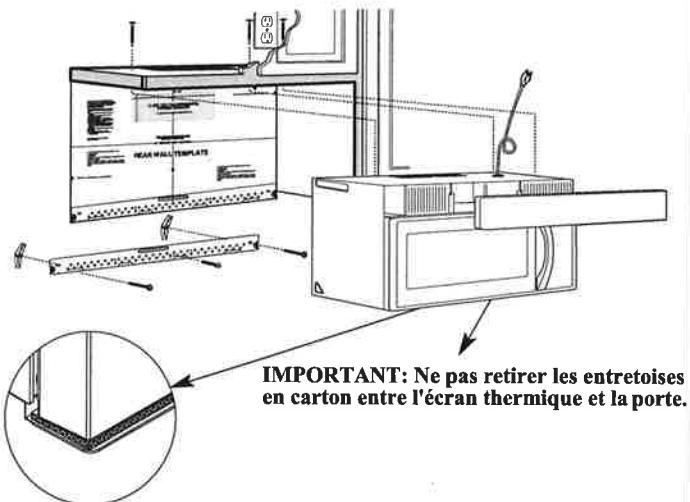
C RECYCLAGE D'AIR (évacuation sans conduit)

VUE D'ENSEMBLE DE L'INSTALLATION

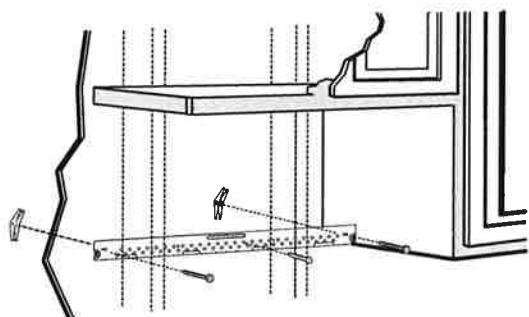
- C1. Fixation de la plaque de montage au mur
- C2. Préparation de l'armoire supérieure
- C3. Vérification de l'plaque du ventilateur
- C4. Installation du four à micro-ondes
- C5. Installation ou changement du filtre à charbon

REMARQUES IMPORTANTES :

- Assurez-vous que les vis du moteur du ventilateur et de la plaque du ventilateur sont solidement vissées lorsque vous les remettez en place. Cela évitera les vibrations excessives.
- Assurez-vous que les fils du moteur sont bien acheminés, fixés et qu'ils ne sont pas coincés.

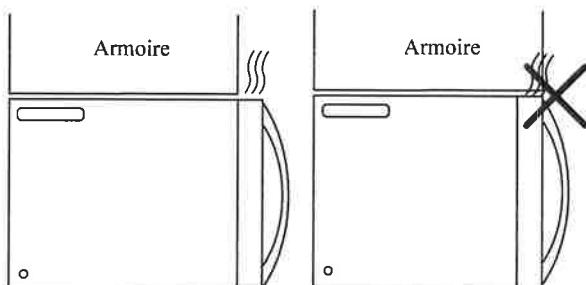


C1. FIXATION DE LA PLAQUE DE MONTAGE AU MUR



Fixez la plaque au mur à l'aide des boulons à ailettes. Vous devez utiliser au moins une vis à bois pour fixer la plaque à un montant.

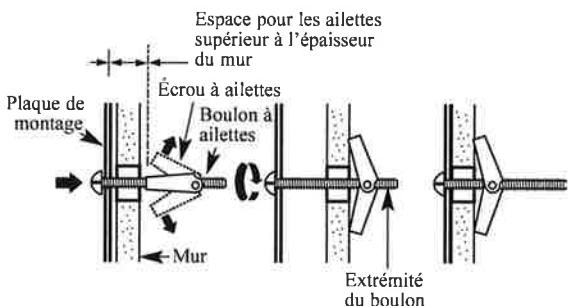
REMARQUE: Si la profondeur du armoire incluant les portes du armoire est plus de 13" alors l'unité doit être espacée du mur utilisant des matériaux adéquats supportant 150 lbs pour permettre une bonne ventilation d'air au sommet/admission d'air.



- 1 Enlevez les écrous à ailettes des boulons.

- 2 Insérez les boulons dans la plaque de montage à travers les trous dans le gypse et réassembliez les écrous à ailettes, à 3/4 po (19 mm) sur chaque boulon.

Pour utiliser les boulons à ailettes :



- 3 Placez la plaque de montage contre le mur et insérez les écrous à ailettes dans les trous du mur pour fixer la plaque.

REMARQUE: Avant de resserrer les boulons à ailettes et la vis à bois, assurez-vous que la plaque est bien centrée sous l'armoire et que les languettes de la plaque de montage touchent le dessous de l'armoire lorsque vous poussez la plaque contre le mur.

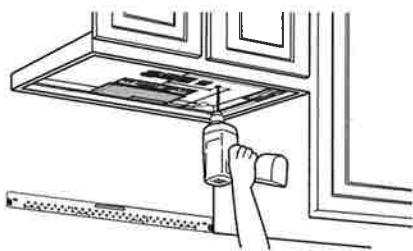
ATTENTION: Faites attention de ne pas vous pincer les doigts entre l'arrière de la plaque de montage et le mur.

- 4 Serrez tous les boulons. Tirez sur la plaque pour faciliter le serrage des boulons.

Instructions d'installation

C2. UTILISATION DU GABARIT POUR ARMOIRE SUPÉRIEURE POUR LA PRÉPARATION DE L'ARMOIRE SUPÉRIEURE

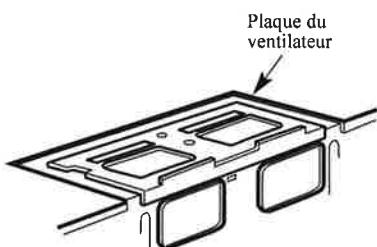
Vous devez percer des trous pour les vis de soutien supérieures, ainsi qu'un trou suffisamment grand pour y faire passer le cordon d'alimentation.



- Lisez les instructions sur le GABARIT POUR ARMOIRE SUPÉRIEURE.
 - Collez-le sous l'armoire supérieure à l'aide de ruban adhésif.
- REMARQUE:** Ajustez correctement le haut du gabarit si le micro-ondes devient espacé du mur à cause de la profondeur du armoire (incluant les portes du armoire) de plus de 13".
- Percez les trous, en suivant les instructions du GABARIT POUR ARMOIRE SUPÉRIEURE.

ATTENTION : Portez des lunettes de sécurité lorsque vous percez des trous dans le fond de l'armoire.

C3. VÉRIFICATION DE L'PLAQUE DU VENTILATEUR



- Placez le four à micro-ondes en position debout, le dessus de l'appareil sur le dessus.
- Inspectez pour affirmer le ventilateur metal est installez dans la cavité.

C4. INSTALLATION DU FOUR À MICRO-ONDES



POUR VOTRE SÉCURITÉ ET POUR FACILITER L'INSTALLATION, L'INSTALLATION DE CE FOUR DOIT ÊTRE EFFECTUÉE PAR DEUX PERSONNES.

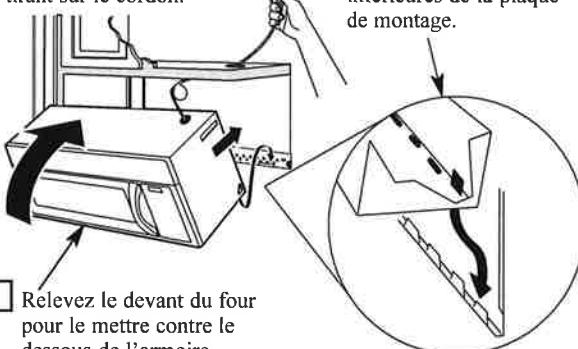
IMPORTANT: Ne pas saisir ou utiliser la poignée ou l'écran thermique durant l'installation. Ne pas retirer les entretoises en carton entre l'écran thermique et la porte.

REMARQUE: Si vos armoires sont en métal, installez un passe-fil en nylon autour de l'orifice du cordon d'alimentation pour empêcher que le cordon soit coupé.

REMARQUE: Si le four est installé sous une armoire dotée d'un rebord avant, nous vous recommandons d'utiliser des entretoises.

IMPORTANT: Si vous n'utilisez pas d'entretoises, des dommages peuvent être causés au boîtier au moment de resserrer les vis.

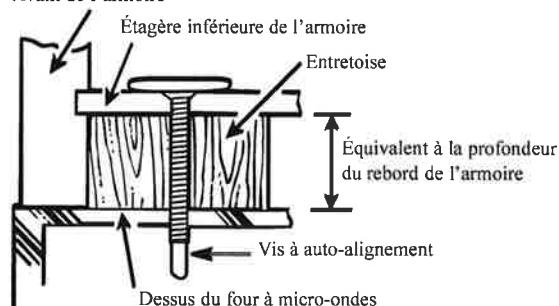
REMARQUE: Lors de l'installation du four à micro-ondes, faites passer le cordon d'alimentation à travers le trou situé dans le fond de l'armoire supérieure. Gardez-le bien serré durant les étapes 1 à 3. Ne coincez pas le cordon ou ne soulevez pas le four en tirant sur le cordon.



2 Relevez le devant du four pour le mettre contre le dessous de l'armoire.

3 Insérez une vis à auto-alignement dans le trou situé au centre de l'armoire supérieure. Fixez temporairement le four en faisant faire au moins **deux tours complets** à la vis après que les filets aient été engagés. (Elle sera complètement resserrée plus tard.) **Assurez-vous que le cordon d'alimentation est bien serré.** Faites attention de ne pas le coincer, particulièrement au moment d'installer le four sous l'armoire.

Avant de l'armoire

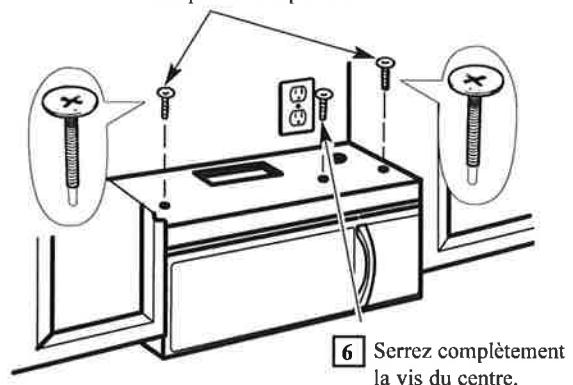


4 Fixez le four à micro-ondes à l'armoire supérieure.

Instructions d'installation

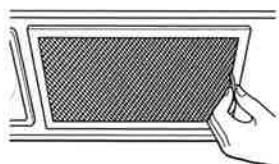
C4. INSTALLATION DU FOUR À MICRO-ONDES (suite)

- 5 Insérez deux vis à auto-alignement à travers les trous de l'armoire supérieure. Faites faire deux tours complets à chaque vis.



- 6 Serrez complètement la vis du centre.

- 7 Serrez les deux vis de chaque côté dans le dessus du four à micro-ondes. (Tout en serrant les vis, soulevez l'avant du four à micro-ondes et poussez-le contre le mur et l'armoire supérieure.)



- 8 Installez les filtres. Consultez le Manuel de l'utilisateur emballé avec le four.

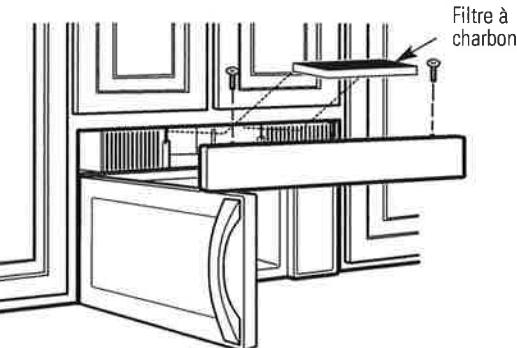
C5. INSTALLATION OU CHANGEMENT DU FILTRE À CHARBON (Certains modèles)

REMARQUE: Le filtre à charbon de bois est installé d'usine dans certains modèles. Référez-vous à l'utilisation et soin pour voir si le vôtre est installé d'usine et pour l'information de remplacement.

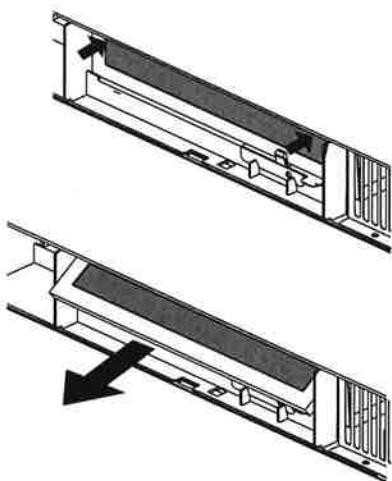
Pour le modèle sans la porte d'accès au filtre de recirculation, suivez ces étapes pour remplacer ou installer un filtre à charbon de bois.

- 1 Débranchez le four à micro-ondes ou déconnectez l'alimentation.

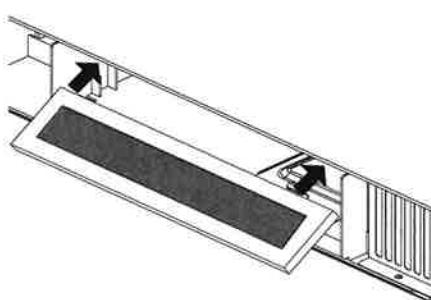
- 2 Ouvrez la porte du micro-ondes et enlevez les deux vis de montage du tuyau localisés en haut du micro-ondes utilisant un #1 pilote de vis Phillips.



- 3 Déballez le filtre à charbon en poussant le haut du filtre vers l'intérieur, puis retirez-le de l'appareil.

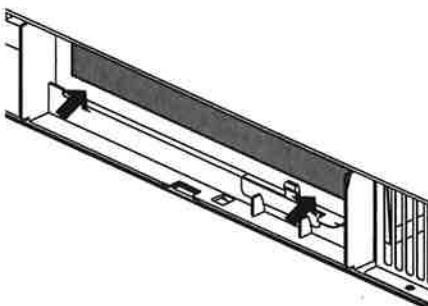


- 4 Glisser le haut du nouveau filtre à charbon dans le haut de la cavité du filter.

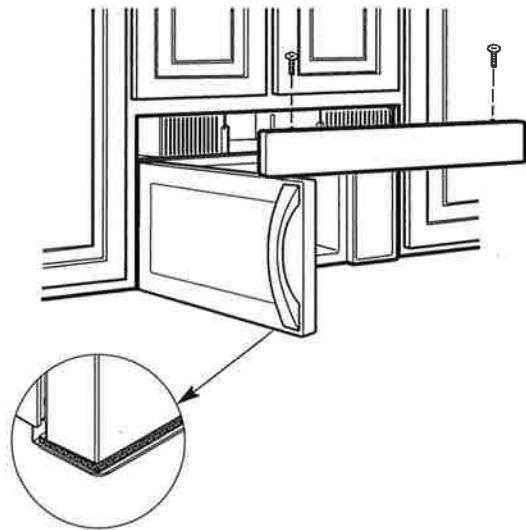


Instructions d'installation

- 5** Appuyez sur le fond du filtre à charbon pour le placer dans la position correcte.



- 6** Réinstallez le tuyau en faisant glisser l'arrière du tuyau en place. Poussez le haut du tuyau en position et faites le bien glisser en place. Replacez les deux vis de montage du tuyau localisés en haut du micro-ondes utilisant un #1 pilote de vis Phillips.



- 7** Fermez la porte du micro-ondes. Branchez le four à micro-ondes ou reconnectez l'alimentation.

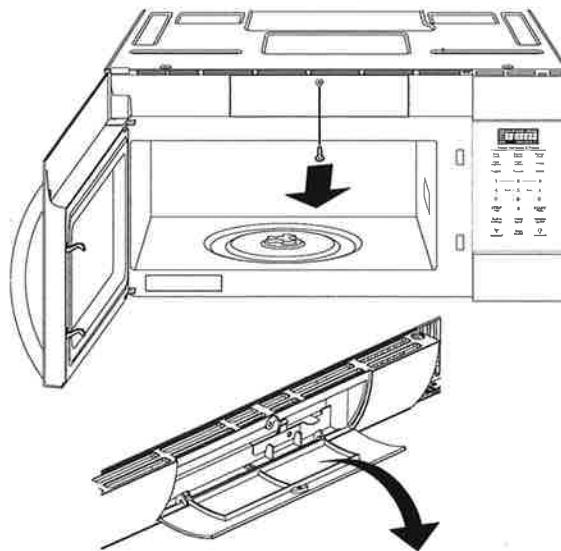
IMPORTANT: Retirer les entretoises en carton entre l'écran thermique et la porte.

Pour le modèle avec la porte d'accès au filtre de recirculation, suivez ces étapes pour remplacer ou installer un filtre PureAir^{MD}.

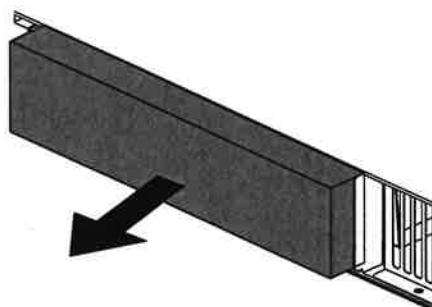
- 1** Déballez le filtre PureAir^{MD} et secouez-le pour retirer tout résidu de charbon.

- 2** À l'aide d'un tournevis cruciforme Phillips, dévissez la porte du compartiment du filtre PureAir^{MD}.

- 3** Ouvrez la porte du compartiment du filtre.

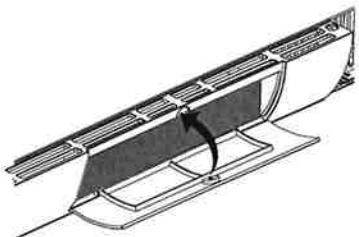
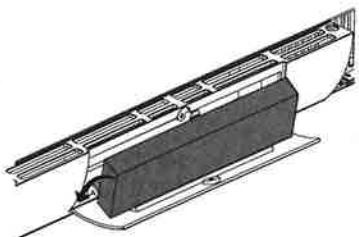


- 4** Tirez l'ancien filtre PureAir^{MD} (le cas échéant) hors de l'appareil pour l'enlever.



Instructions d'installation

- 5** Dans l'orifice situé au dos de la porte, placez obliquement le nouveau filtre PureAir^{MD} et rabattez-le jusqu'à ce qu'il soit à la verticale et bien fixé dans son emplacement dédié.



- 6** Veillez à ce que le filtre PureAir^{MD} soit bien encastré et à la verticale. Fermez la porte et revissez les vis. Votre filtre PureAir^{MD} est prêt à l'emploi.

Instructions d'installation

AVANT D'UTILISER VOTRE FOUR À MICRO-ONDES

- 1.** Assurez-vous que le four à micro-ondes a été installé conformément aux instructions.

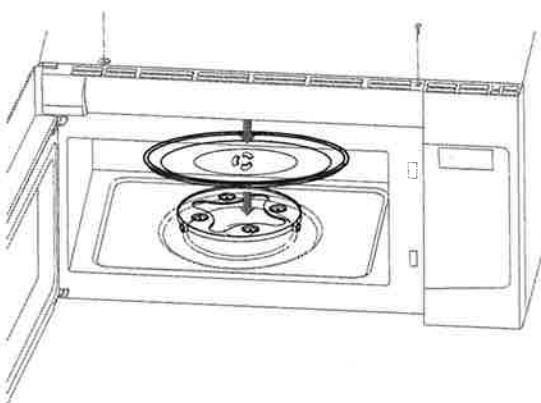


- 5.** Réinstallez le fusible ou réenclenchez le disjoncteur du panneau de distribution principal.

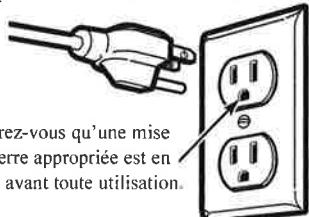


- 2.** Enlevez tout le matériel d'emballage du four à micro-ondes.

- 3.** Installez le plateau tournant et la plaque en verre dans le four à micro-ondes.



- 4.** Branchez le cordon d'alimentation séparée et dédiée sur une prise de courant réservée de 15 à 20 A.



- 6.** Lisez le manuel d'utilisation et d'entretien.

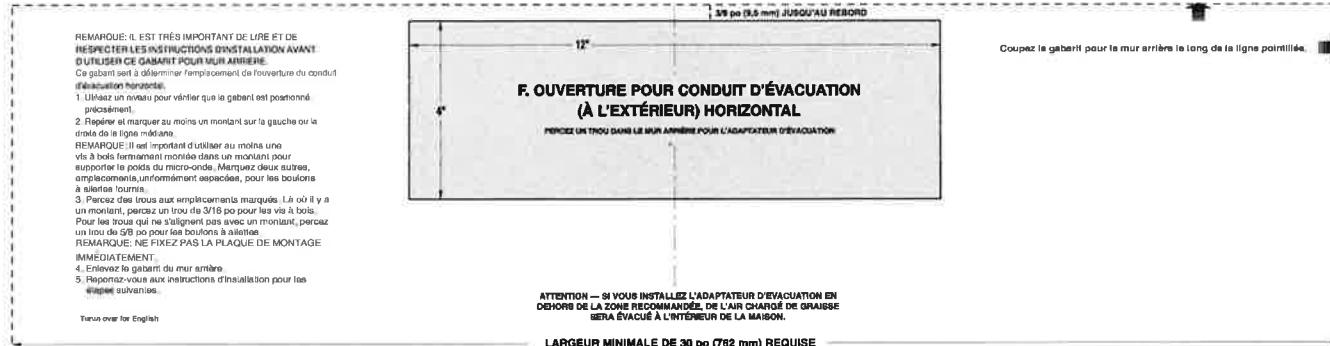


- 7.** CONSERVEZ LES INSTRUCTIONS D'INSTALLATION POUR VOTRE INSPECTEUR LOCAL.

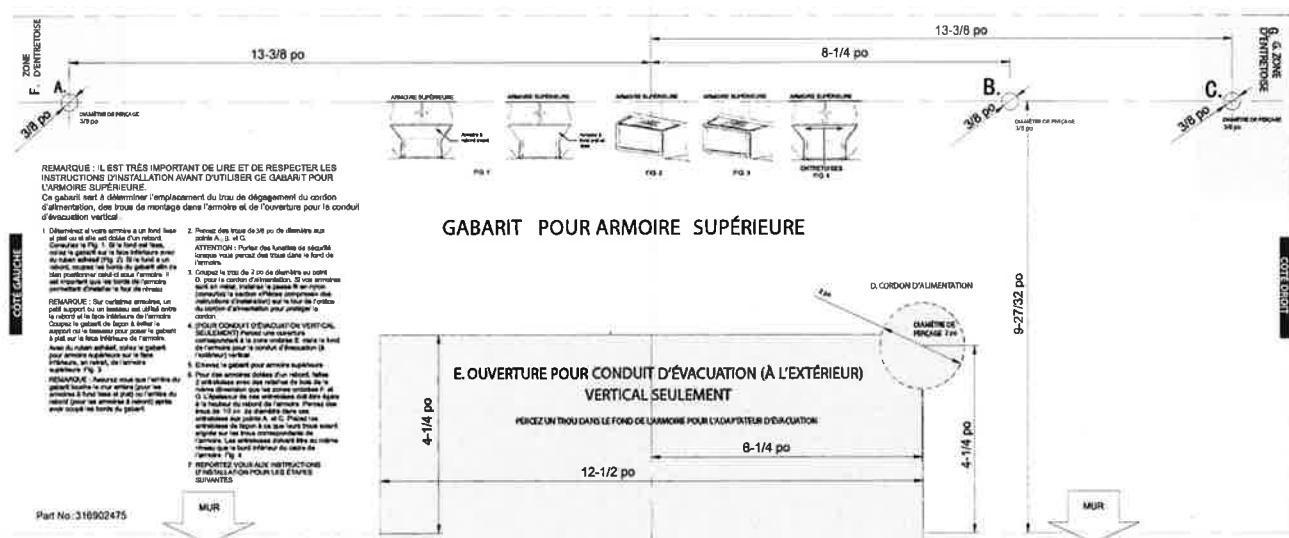
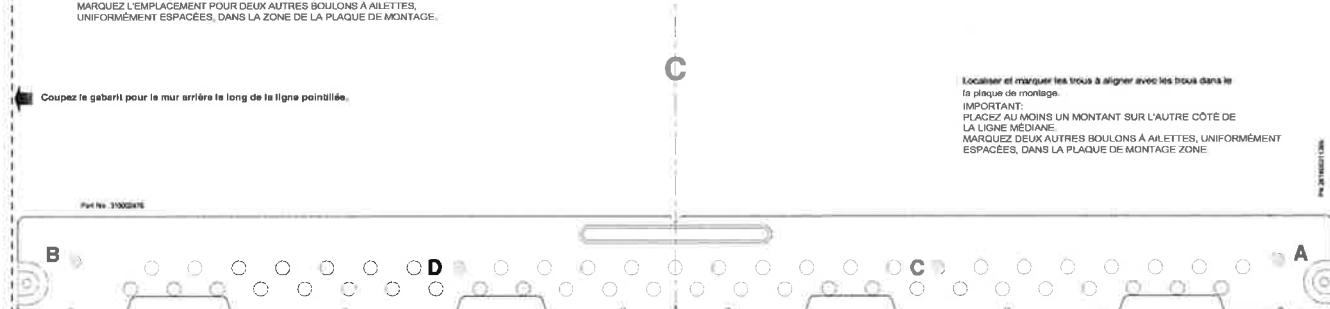


- 8.** Remplissez la carte d'enregistrement du produit.





GABARIT POUR MUR ARRIÈRE



Instrucciones de instalación

Horno microondas (encima de la estufa)

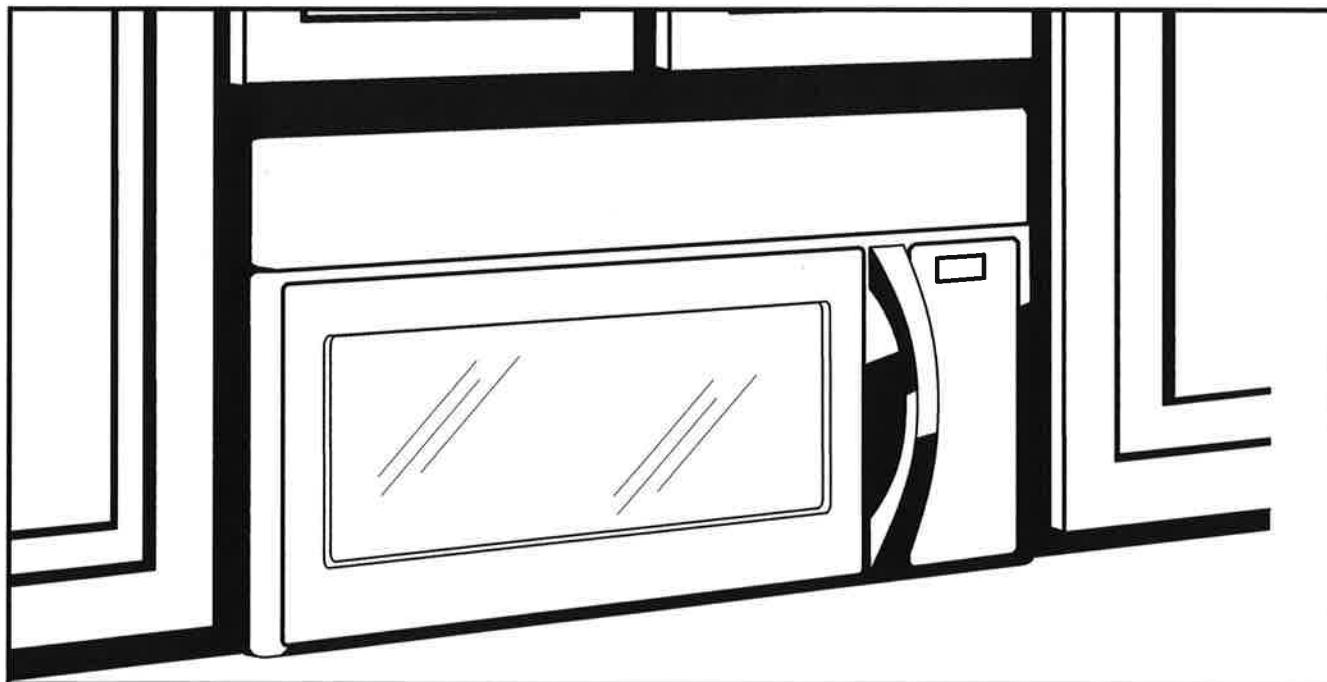
¿Preguntas? Llame al 1-800-944-9044(US) o 1-800-265-8352(Canada)

ANTES DE EMPEZAR

Lea estas instrucciones completamente y con atención.

- **IMPORTANTE:** conserve estas instrucciones para uso futuro del inspector local.
- **IMPORTANTE:** asegúrese de que se cumplan todas las normas y los códigos relevantes.
- **Nota para el instalador:** asegúrese de dejar estas instrucciones en manos del consumidor.

- **Nota para el consumidor:** conserve estas instrucciones para referencia futura.
- **Nivel de preparación técnica:** la instalación de este electrodoméstico requiere conocimientos mecánicos y eléctricos básicos.
- La instalación correcta es responsabilidad del instalador.
- Las fallas del producto que resulten de una instalación incorrecta no están cubiertas bajo la garantía.



**LEA CUIDADOSAMENTE.
CONSERVE ESTAS INSTRUCCIONES.**

Instrucciones de instalación

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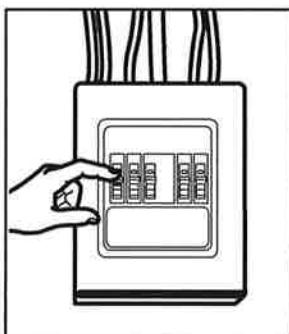
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Instrucciones de instalación

INSTRUCCIONES IMPORTANTES SOBRE SEGURIDAD

Este producto requiere un tomacorriente de tres clavijas con puesta a tierra. Antes de proceder con la instalación del electrodoméstico, el instalador debe realizar una verificación de la continuidad de la puesta a tierra del tomacorriente, a fin de asegurarse de que es correcta. Si la puesta a tierra no es correcta o si el tomacorriente no cumple con los requisitos eléctricos descritos en este manual (en la sección REQUISITOS ELÉCTRICOS), se deberá solicitar a un electricista calificado que corrija cualquier defecto detectado.



PRECAUCIÓN: por razones de seguridad personal, antes de comenzar con el procedimiento de instalación, retire el fusible correspondiente o desconecte el disyuntor doméstico, a fin de evitar cualquier lesión personal causada por un choque eléctrico.

PRECAUCIÓN: por razones de seguridad personal, la superficie de instalación debe ser capaz de soportar la carga del gabinete, además del peso adicional del producto (63 a 85 libras o 28,5 a 38,5kg), así como cargas adicionales de hasta 50 libras (22,7kg), o bien un peso total de 113 a 135 libras (51,3 a 61,2kg).

PRECAUCIÓN: por razones de seguridad personal, este producto no puede ser instalado en espacios de gabinete tipo insular o peninsular. Debe ser atornillado (instalado) TANTO al gabinete superior, COMO a la pared.

NOTA: por razones de seguridad personal y para facilitar la instalación, se recomienda que dos personas instalen el producto.

IMPORTANTE: ¡LEA CUIDADOSAMENTE! POR RAZONES DE SEGURIDAD PERSONAL, EL ELECTRODOMÉSTICO DEBE QUEDAR DEBIDAMENTE PUESTO A TIERRA, PARA EVITAR CUALQUIER CHOQUE ELÉCTRICO QUE PUEDA CAUSAR LA MUERTE.



El cable de alimentación de este producto está de este producto está equipado con un enchufe (con puesta a tierra) de 3 clavijas, compatible con un tomacorriente de pared (con puesta a tierra) de 3 clavijas, lo cual minimiza la posibilidad de choque eléctrico causado por el producto.

Antes de usar el electrodoméstico, verifique la puesta a tierra del tomacorriente.

Se debe solicitar a un electricista calificado que inspeccione el tomacorriente de pared y el circuito eléctrico correspondiente, a fin de asegurarse de que el tomacorriente esté debidamente puesto a tierra.

En caso de que el tomacorriente estándar disponible sea solamente para un enchufe de dos clavijas, es muy importante solicitar a un electricista calificado que lo reemplace con un tomacorriente de tres clavijas puesto a tierra.

BAJO NINGUNA CIRCUNSTANCIA CORTE, ALTERE O ELIMINE LA TERCERA CLAVIJA (TIERRA) DEL CABLE ELÉCTRICO. NO USE UN CABLE ELÉCTRICO DE EXTENSIÓN.

REQUISITOS ELÉCTRICOS

La potencia nominal del producto es de 120 voltios de CA, 60 Hertz, 15 amperios y 1,6 kilovatios. Debe ser conectado a un circuito separado y dedicado de alimentación eléctrica que tenga el voltaje y la frecuencia adecuados.

El diámetro del cable debe cumplir con los requisitos correspondientes del código eléctrico nacional (National Electrical Code o NEC) de los EE.UU., o bien con las normas vigentes locales correspondientes a la potencia nominal en kilovatios del aparato. El cable y el enchufe de alimentación eléctrica deben ser conectados a un tomacorriente (con puesta a tierra) de un circuito separado y dedicado de 15 a 20 amperios. El tomacorriente debe estar situado en el espacio superior del gabinete en el cual se instalará el microondas. El tomacorriente y el circuito de alimentación eléctrica deben ser instalados por un electricista calificado y deben cumplir con el código NEC de los EE.UU. o con las normas vigentes locales correspondientes.

Instrucciones de instalación

DAÑOS-ENVÍO (TRANSP-ORTE)/INSTALACIÓN

- Si el producto ha resultado dañado durante su envío (transporte), devuélvalo a la tienda/el almacén donde lo adquirió, para que lo reparen o lo cambien por uno nuevo.
- Si el producto ha sido dañado por el comprador, la reparación o el reemplazo del producto es responsabilidad del comprador.
- Si el instalador (no el comprador) daña el producto, la reparación o el reemplazo del mismo tendrá que ser acordado entre el comprador y el instalador.

PIEZAS INCLUIDAS

KIT DE FERRETERÍA

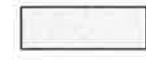
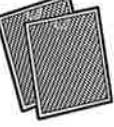
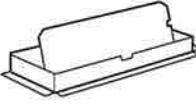
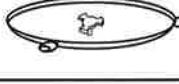
PIEZA	CANTIDAD
	Tornillos para madera (1/4" x 2")
	Tornillos de fiador (y tuercas de mariposa) (3/16" x 3")
	Tornillos autoalineantes para máquina (1/4"-28 x 3 1/4")
	Moldura aislante de nylon (para los gabinetes metálicos)

Las piezas de ferretería vienen dentro de un paquete (kit) incluido con el electrodoméstico. Verifique que el paquete contiene todas las piezas listadas aquí.

NOTA: se incluyen algunas piezas adicionales.

PIEZAS INCLUIDAS (CONT.)

KIT DE FERRETERÍA

PIEZA	CANTIDAD
	Plantilla para el gabinete superior
	Plantilla para la pared trasera combinado
	Instrucciones de instalación
	Guia de Uso y Cuidado
	Filtros de grasa (empacados por separado)
	Adaptador
	Bandeja de vidrio
	Anillo de la bandeja giratoria
	Estante de alambre de convección
	Estante
	Filtro PureAir® de microondas

Instrucciones de instalación

HERRAMIENTAS NECESARIAS



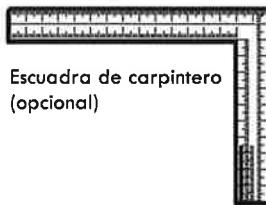
Destornillador Phillips #1



Lápiz



Regla o cinta métrica
con borde recto



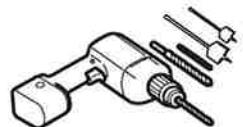
Escuadra de carpintero
(opcional)



Tijera para hojalata (para
recortar el regulador de
extracción, si fuera necesario)



Tijera (para cortar las
plantillas si fuera necesario)



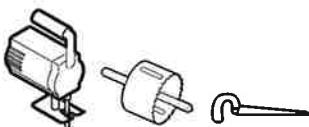
Taladro eléctrico con brocas
de 3/16", 1/2" y 5/8"



Bloques de relleno o de madera
sobrante, si fueran necesarios
para el espacio del gabinete
superior (se utilizan solamente en
instalaciones de gabinetes con la
superficie inferior hueca)



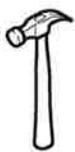
Guantes



Herramienta para cortar
(serrucho sierra eléctrica o
seguita)



Detector de vigas • Martillo (opcional)
(entrámado)



Nivel

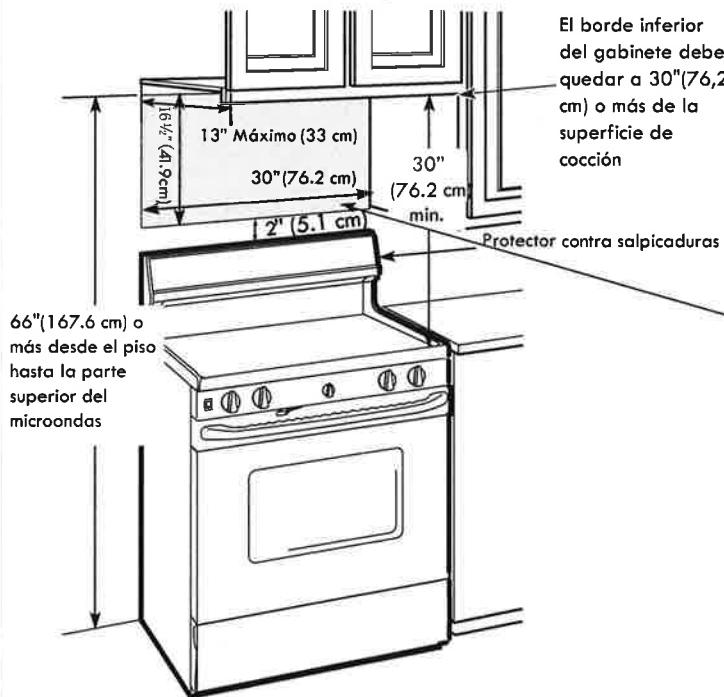


Cinta aislante y cinta de pintor



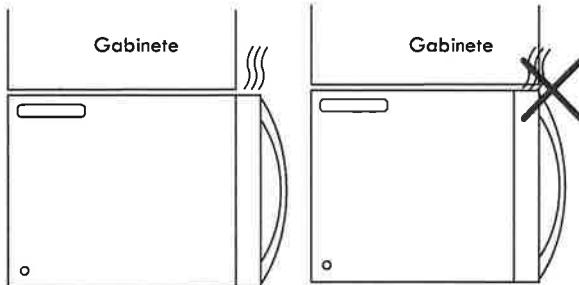
Gafas de seguridad

ESPACIO PARA LA INSTALACIÓN



NOTAS:

- El espacio entre los gabinetes debe ser de 30" (76,2 cm) de ancho y libre de obstrucciones.
- Si la extracción de aire para el horno microondas será dirigida hacia fuera de la cocina, consulte la sección sobre campana extractora, para informarse sobre la preparación del conducto de extracción.
- Si va a instalar el horno microondas debajo de un gabinete plano y liso, tenga cuidado de seguir las instrucciones sobre la plantilla para el gabinete superior, especialmente la parte relacionada con el espacio libre para el cable eléctrico.
- Como el gua de la instalación, se vea el pgina 24 por la informacín de plantilla montada.
- Si la profundidad del gabinete incluyendo las puertas es mayor de 13" entonces la unidad debe alejarse de la pared con materiales adecuados que soporten 150 lbs para permitir una ventilación adecuada/toma de aire.

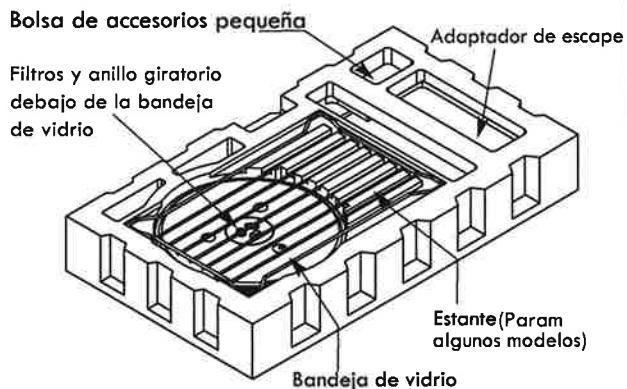


Instrucciones de instalación

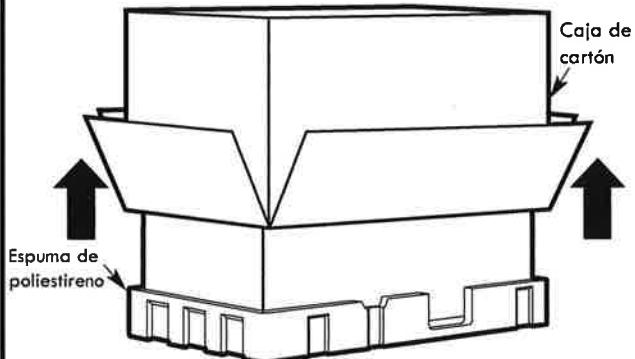
1 COLOCACIÓN DE LA PLACA DE INSTALACIÓN

A. PROCEDIMIENTO PARA SACAR DE LA CAJA EL MICROONDAS Y LA PLACA DE INSTALACIÓN

- 1 Retirar las instrucciones de instalación, uso y cuidado, adaptador de escape, anillo giratorio, estante, filtros, bandeja de vidrio y bolsa de accesorios pequeña. No retire el poliestireno de la parte delantera del horno.

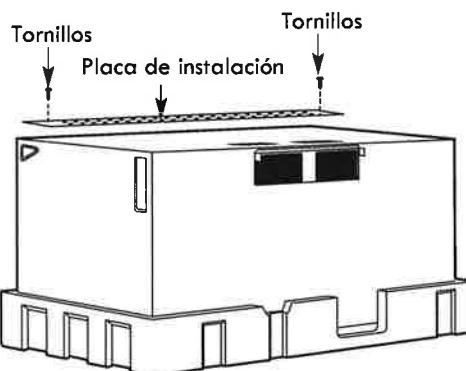


- 2 Doble hacia atrás las 4 lengüetas de la caja de cartón, para que queden contra los lados de la caja. A continuación, dé la vuelta con cuidado al horno y la caja, para que la caja quede en la parte superior. El horno quedará colocado sobre el protector de espuma.



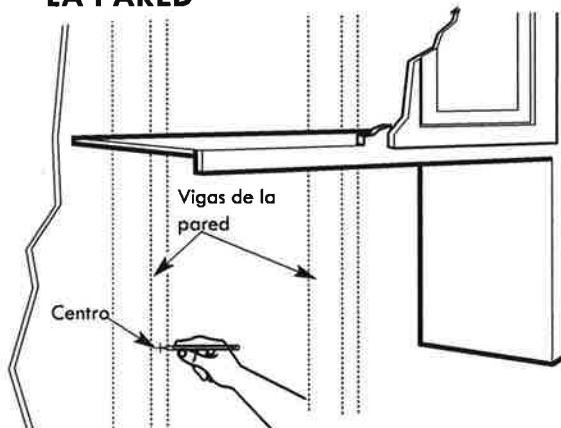
- 3 Tire de la caja de cartón hacia arriba, para separarla del horno.

- 4 Quite la bolsa de plástico en el medio para retirar la placa de instalación.



- 5 Quite los tornillos de la placa de instalación. Dicha placa se utilizará como plantilla para la pared trasera y para la instalación. Vuelva a insertar los tornillos en los agujeros de los cuales habían sido extraídos.

B. LOCALIZACIÓN DE LAS VIGAS DE LA PARED



- 1 Localice las vigas mediante cualquiera de los métodos siguientes:

- A. Detector de vigas. aparato magnético que detecta clavos.
- B. Use un martillo para dar golpecitos leves sobre la superficie de instalación, a fin de detectar el sonido de superficie maciza (no hueca). Esto indicará la ubicación de una viga.

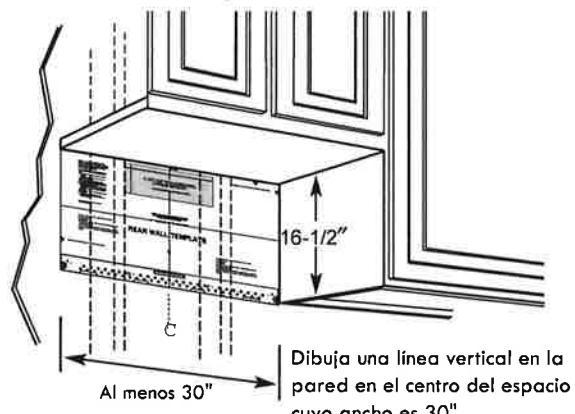
- 2 Tras localizar la(s) viga(s), localice su centro haciendo pruebas en la pared con un pequeño clavo que le permita detectar los bordes de la viga. A continuación, haga una marca que quede a la mitad de ambos bordes.

- 3 El centro de cualquier viga adyacente debe quedar a 16" (40,6 cm) o 24" (61 cm) de dicha marca. Trace una línea hacia abajo del centro de las vigas.
EL MICROONDAS DEBE QUEDAR ATORNILLADO AL MENOS A UNA VIGA DE LA PARED

Instrucciones de instalación

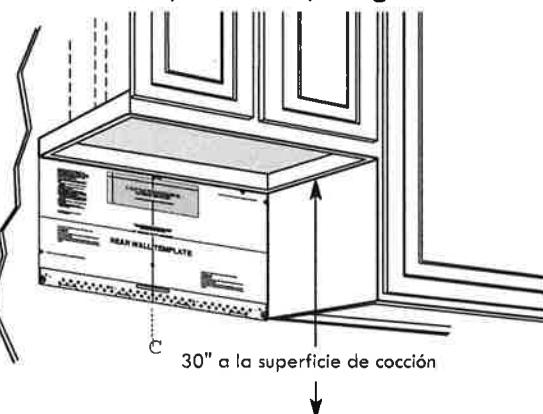
C. UBICACIÓN DE LA PLACA PARA LA PARED DE BAJO DEL GABINETE

Posición de la placa-debajo de la superficie plana inferior del gabinete



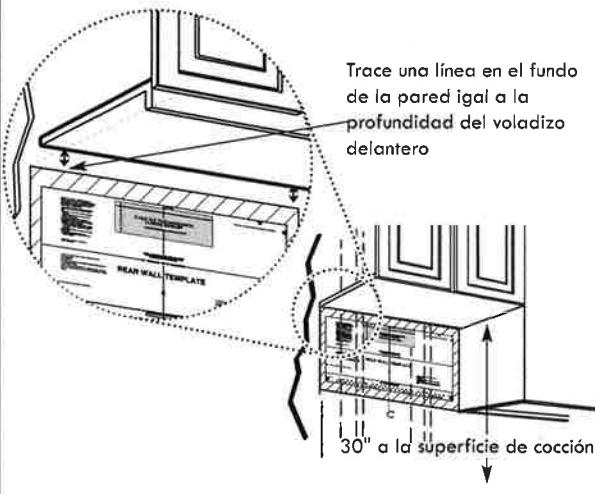
Dibuja una línea vertical en la pared en el centro del espacio cuyo ancho es 30".
Cinta la Plantilla de pared posterior en la pared correspondiente a la línea y toca el fondo del armario.

Posición de la placa-debajo de la superficie hueca inferior (con marco) del gabinete



Dibuja una línea vertical en la pared en el centro del espacio cuyo ancho es 30".
Cinta la Plantilla de pared posterior en la pared correspondiente a la línea y toca el fondo del armario.

Posición de la placa-debajo de la superficie hueca saliente, delantera e inferior (con marco) del gabinete



Es posible que sus gabinetes tengan molduras decorativas que interfieran con la instalación del microondas. En este caso, quite dichas molduras para poder instalar correctamente el microondas y que quede nivelado.

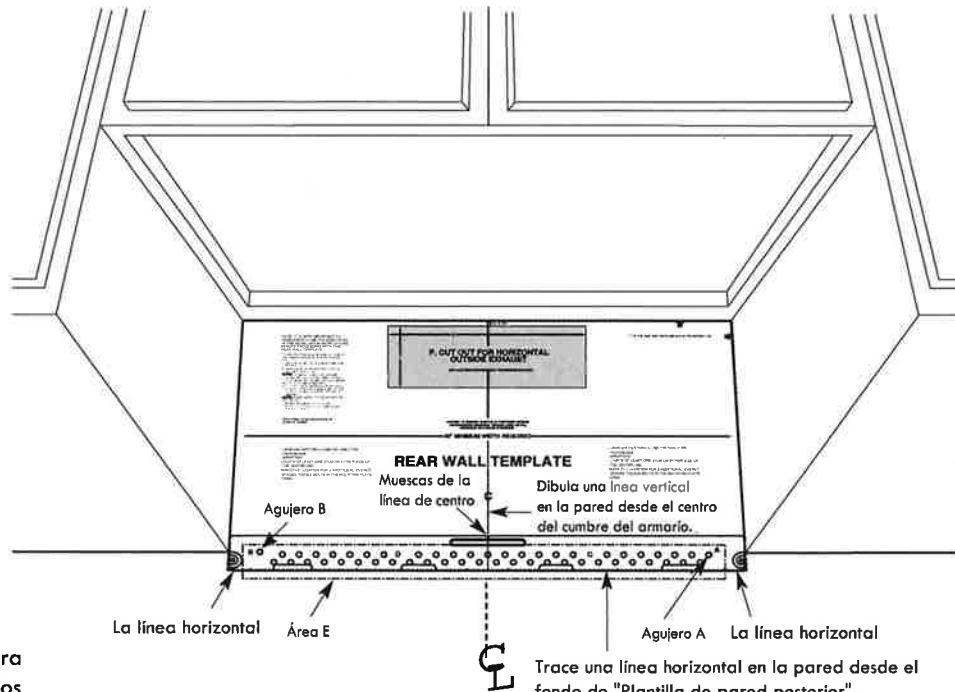
EL MICROONDAS DEBE QUEDAR NIVELADO.

Use un nivel para asegurarse de que la superficie inferior del gabinete esté nivelada. Si el gabinete tiene solamente una parte delantera saliente, sin parte trasera o lateral del marco, instale la placa de instalación a la misma distancia que la distancia de profundidad de la parte saliente delantera. Esto mantendrá el microondas nivelado.

- 1 Mida la distancia de profundidad interior de la parte saliente delantera.
- 2 Trace una línea horizontal en la pared trasera, debajo de la superficie inferior del gabinete, a una distancia igual que la distancia de profundidad interior de la parte saliente delantera.
- 3 Solamente en el caso de este tipo de instalación con parte saliente delantera, alinee las lengüetas de instalación con dicha línea horizontal, sin tocar la superficie inferior del gabinete, como se describe en el paso D.

Instrucciones de instalación

D. ALINEACIÓN DE LA PLACA PARA LA PARED



PRECAUCIÓN: para
evitar cortes por los
bordes afilados.

- 1** Trace una línea vertical en la pared, en el centro del espacio cuyo ancho es 30".
- 2** Trace una línea horizontal en la pared desde el fondo de "Plantilla de pared posterior".
- 3** Encuentre un travesaño en el área E de la placa de montaje. Consulte la sección 1B: Encontrar travesaños de pared.
- 4** Para adherir la placa de montaje al travesaño taladre un agujero de 3/16". Taladre un agujero de 5/8" para tornillo acodado en otra ubicación (Agujero A o Agujero B).

**NOTA: NO INSTALE LA PLACA EN ESTE
MOMENTO.**

NOTA: Los Agujero A y los Agujero B se encuentran dentro de la regin E. Si tanto el agujero C como el D no quedan en una viga, localice una viga en el área E y trace un quinto círculo que quede alineado con la viga. Es importante que al menos un tornillo para madera quede fijado firmemente a una viga, a fin de que pueda soportar el peso del microondas. Deje a un lado la placa de instalación.

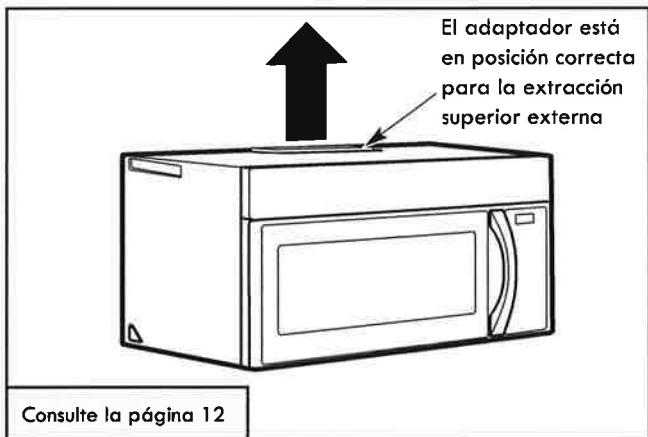
Instrucciones de instalación

2 TIPOS DE INSTALACIÓN (A Elección Entre A, B o C)

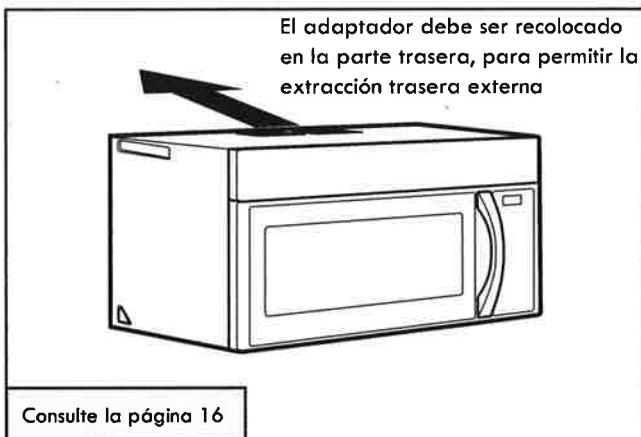
Este horno microondas está diseñado para adaptarse a los tres tipos siguientes de ventilación:
A. Extracción superior externa (conducto vertical)
B. Extracción trasera externa (conducto horizontal)
C. Recirculación (sin conducto de extracción)

NOTA: este horno microondas se ha fabricado para un sistema de Recirculación. Seleccione el tipo de ventilación necesario para su instalación y proceda con las instrucciones de la sección correspondiente.

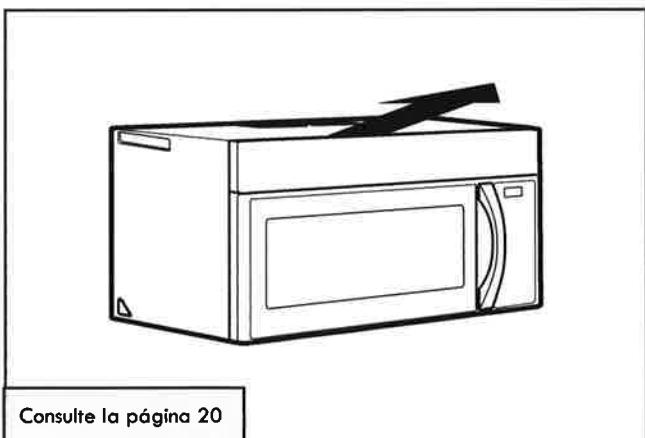
A EXTRACCIÓN SUPERIOR EXTERNA (CONDUCTO VERTICAL)



B EXTRACCIÓN TRASERA EXTERNA (CONDUCTO HORIZONTAL)



C RECIRCULACIÓN (SIN CONDUCTO DE EXTRACCIÓN)



Los modelos fabricados para un sistema de extracción basado en la recirculación del aire vienen con la instalación de fábrica de un filtro de carbón, el cual ayuda a eliminar el humo/los vapores y los olores.

NOTA: lea las dos páginas siguientes solamente si va a instalar un sistema de extracción hacia el exterior. Si tiene planeado realizar una instalación basada en la recirculación del aire dentro de la cocina, continúe con la página 20.

Instrucciones de instalación

INSTRUCCIONES DE INSTALACIÓN DE CONDUCTOS DE ESCAPE EXTERNAS

NOTA: en caso de que sea necesario instalar conductos, tenga en cuenta que el largo total de los conductos, rectangulares (ancho de 3 1/4" x 10" u 8,2 cm x 25,4 cm) o redondos (diámetro de 5" ó 12,7 cm) / (diámetro de 6" ó 15,2 cm) **NO debe ser superior a 120 pies (36,5 m).**

La ventilación exterior requiere el uso de un CONDUCTO PARA CAMPANA EXTRACTORA. Lea con atención las siguientes recomendaciones.

NOTA: es importante que se instale el sistema de ventilación siguiendo la ruta más directa y con el menor número posible de codos. Esto garantizará la salida fluida del aire por los conductos de extracción y evitará cualquier bloqueo. **Asimismo, asegúrese de que los reguladores de extracción se muevan libremente y nada bloquee los conductos.**

Conección de escape

El adaptador fue diseñado para concordar con un ducto rectangular estandar 31/4" x 10" (8.2 x 25.4 cm). Si se requiere de un ducto redondo, se debe utilizar un adaptador de transición.

Un ducto con un diámetro de 5" (12.7cm) / 6" (15.2cm) es aceptable.

Largo máximo del conducto:

Para lograr una salida satisfactoria del aire, el largo total del conducto rectangular con un ancho de 3 1/4" x 10" (8,2 x 25,4 cm) o redondo con un diámetro de 5" (12,7 cm) / 6" (15,2 cm) no debe ser mayor que 120 pies (36,5 m).

Los codos, los adaptadores, las tapas de salida al techo o a la pared, etc., representan áreas de resistencia adicional al flujo del aire y son equivalentes a una sección de conducto recto cuyo largo es mayor que su tamaño físico real. Cuando calcule el largo total del conducto, añada el largo equivalente de cada uno de los adaptadores, codos, etc., más el largo de todas las secciones rectas del conducto. La tabla siguiente contiene información para saber cómo calcular el largo total (en medidas equivalentes) del sistema de conductos, a partir del largo aproximado en pies de algunos conductos/adaptadores/codos, etc. estándar.

PIEZAS DEL CONDUCTO	LARGO (MEDIDAS EQUIVALENTES)	x	No DE UNIDADES- UTILIZADAS	=	LARGO (MEDIDAS EQUIVALENTES)	
	Adaptador de unión entre el conducto rectangular y el redondo*	5 pies (1,5 m)	x	()	=	Pies o m (metros)
	Tapa de salida a la pared	40 pies (12,2 m)	x	()	=	Pies o m (metros)
	Codo de 90°	10 pies (3 m)	x	()	=	Pies o m (metros)
	Codo de 45°	5 pies (1,5m)	x	()	=	Pies o m (metros)
	Codo de 90°	25 pies (7,6 m)	x	()	=	Pies o m (metros)
	Codo de 45°	5 pies (1,5 m)	x	()	=	Pies o m (metros)
	Tapa d salida al techo	24 pies (7,3 m)	x	()	=	Pies o m (metros)
	Conducto recto redondo de 6" (15,2 cm) de diámetro o rectangular de 31/4" x 10" (8,2 x 25,4 cm) de ancho	1 pies (0,3m)	x	()	=	Pies o m (metros)
Largo total del sistema de conductos =					Pies o m (metros)	



IMPORTANTE: si se utiliza un adaptador de unión entre el conducto rectangular y el redondo, los bordes inferiores del regulador de extracción tendrán que ser recortados (con una tijera para hojalata), a fin de que se ajusten y permitan el libre movimiento del regulador.

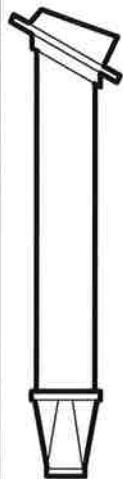
Los largos (en medidas equivalentes) de las piezas del conducto están basados en pruebas reales y se ajustan a los requisitos para un buen rendimiento de ventilación con cualquier campana extractora.

Instrucciones de instalación

CONDUCTOS DE ESCAPE EXTERNAS

EXTRACCIÓN SUPERIOR EXTERNA (SÓLO EJEMPLO)

La siguiente tabla contiene un ejemplo de uno posible instalación de un sistema de conducto de extracción.

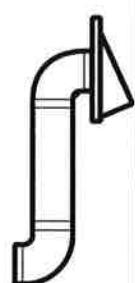


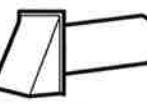
PIEZAS DEL CONDUCTO	LARGO (MEDIDAS EQUIVALENTES)	x	NO DE UNIDADES-UTILIZADAS	=	LARGO (MEDIDAS EQUIVALENTES)
	24 pies (7,3 m)	x	(1)	=	24 pies (7,3 m)
	12 pies (3,6 m)	x	(1)	=	12 pies (3,6 m)
	5 pies (1,5 m)	x	(1)	=	5 pies (1,5 m)
Los largos (en medidas equivalentes) de las piezas del conducto están basados en pruebas reales y se ajustan a los requisitos para un buen rendimiento de ventilación con cualquier campana extractora.					Largo total del sistema de conductos = 41 pies (12,5 m)

* **IMPORTANTE:** si se utiliza un adaptador de unión entre el conducto rectangular y el redondo, los bordes inferiores del regulador de extracción tendrán que ser recortados (con una tijera para hojalata), a fin de que se ajusten y permitan el libre movimiento del regulador.

EXTRACCIÓN TRASERA EXTERNA (SÓLO EJEMPLO)

La siguiente tabla contiene un ejemplo de una posible instalación de un sistema de conducto de extracción.



PIEZAS DEL CONDUCTO	LARGO (MEDIDAS EQUIVALENTES)	x	NO DE UNIDADES-UTILIZADAS	=	LARGO (MEDIDAS EQUIVALENTES)
	40 pies (12,2 m)	x	(1)	=	40 pies (12,2 m)
	3 pies (0,9 m)	x	(1)	=	3 pies (0,9 m)
	10 pies (3 m)	x	(2)	=	20 pies (3 m)
Los largos (en medidas equivalentes) de las piezas del conducto están basados en pruebas reales y se ajustan a los requisitos para un buen rendimiento de ventilación con cualquier campana extractora.					Largo total del sistema de conductos = 63 pies (19,2 m)

NOTA: en el caso de extracción por la parte trasera, hay que tener cuidado de alinear los conductos de extracción con el espacio entre las vigas (el entramado), o bien que la pared haya sido preparada durante su construcción para dejar suficiente espacio entre las vigas para el sistema de extracción.

Instrucciones de instalación

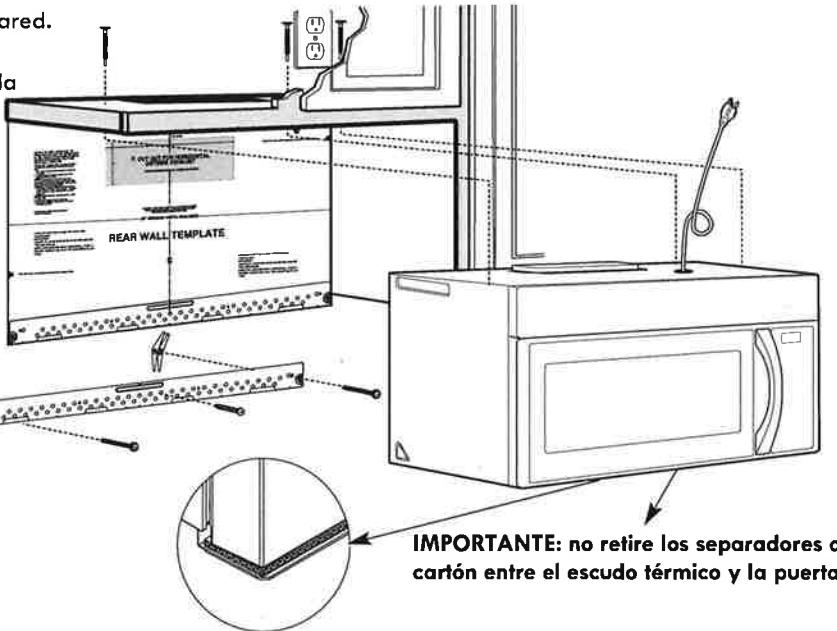
A EXTRACCIÓN SUPERIOR EXTERNA (conducto vertical)

DESCRIPCIÓN GENERAL DE LA INSTALACIÓN

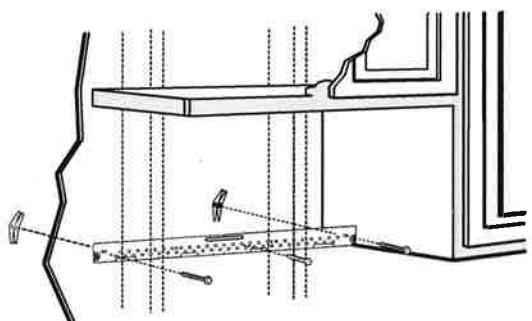
- A1. Montaje de la placa de instalación en la pared.
- A2. Preparación del gabinete superior.
- A3. Ajuste del ventilador del microondas para la extracción superior externa.
- A4. Verificación del funcionamiento del regulador de extracción.
- A5. Instalación del horno microondas.
- A6. Ajuste del adaptador de extracción.
- A7. Acoplamiento del sistema de conductos.

NOTAS IMPORTANTES:

- Asegúrese de que los tornillos del-motor del ventilador y la placa del ventilador queden firmemente apretados al volver a instalarlos. Esto ayudará a prevenir el exceso de vibraciones.
- Asegúrese de que el cableado del motor quede debidamente orientado y asegurado, y que los cables no queden atrapados.



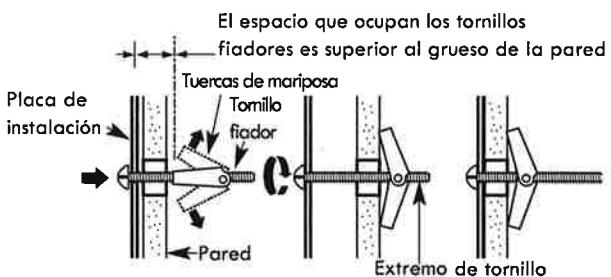
A1. MONTAJE DE INSTALACIÓN LA PLACA DE EN LA PARED



Fije la placa en la pared con los tornillos de fiador. Al menos un tornillo para madera debe ser utilizado para fijar la placa a una viga de la pared.

- 1 Quite las tuercas de mariposa de los tornillos.
- 2 Inserte los tornillos en la placa de instalación, a través de los agujeros taladrados en las partes de la pared que no son viga (los paneles) y vuelva a insertar las tuercas de mariposa hasta $3/4"$ (19 mm) de cada tornillo.

Para utilizar tornillos de fiador:



- 3 Coloque la placa de instalación contra la pared e inserte las tuercas de mariposa en los agujeros de la pared, a fin de instalar la placa.

NOTA: antes de apretar los tornillos de fiador y el tornillo para madera, asegúrese de que las lengüetas de la placa de instalación toquen la parte inferior del gabinete cuando sean empujadas a ras contra la pared, y que la placa quede debidamente centrada bajo el gabinete.

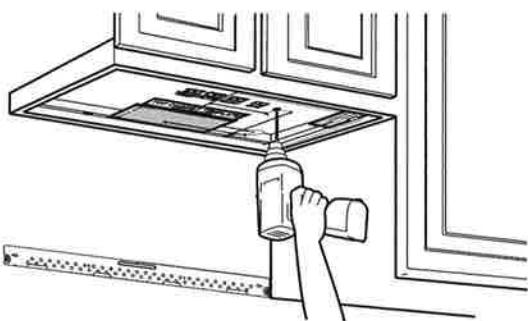
PRECAUCIÓN: tenga cuidado de evitar que sus dedos queden atrapados entre la parte trasera de la placa de instalación y la pared.

- 4 Apriete todos los tornillos. Tire de la placa alejándola de la pared, a fin de que resulte más fácil apretar los tornillos.

Instrucciones de instalación

A2. USO DE LA PLANTILLA PARA EL GABINETE SUPERIOR A FIN DE PREPARAR EL ÁREA DE DICHO GABINETE

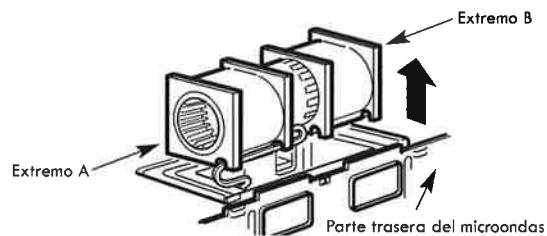
Es necesario taladrar agujeros para los tornillos de soporte superior, realizar un agujero lo suficientemente grande para que el cable eléctrico pueda pasar a través y recortar también un hueco lo suficientemente amplio para el adaptador de extracción.



- Lea las instrucciones de la sección PLANTILLA PARA EL GABINETE SUPERIOR.
- Adhiera con cinta la plantilla al gabinete superior.
- Taladre los agujeros, siguiendo las instrucciones de la sección PLANTILLA PARA EL GABINETE SUPERIOR.

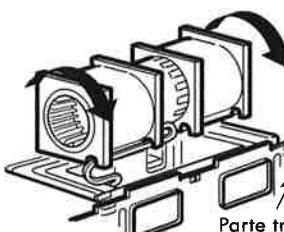
PRECAUCIÓN: cuando taladre los agujeros en la superficie inferior del gabinete, use gafas protectoras.

- 2** Tire del ventilador con cuidado hacia afuera. Los cables se extenderán lo suficiente para permitir el ajuste del ventilador.

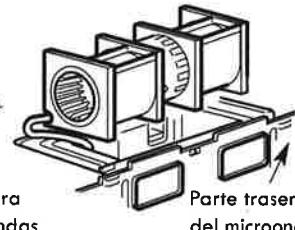


- 3** Gire el ventilador 90 ° de manera que las aberturas de las aletas del ventilador queden orientadas hacia la parte superior del microondas.

Antes de girar



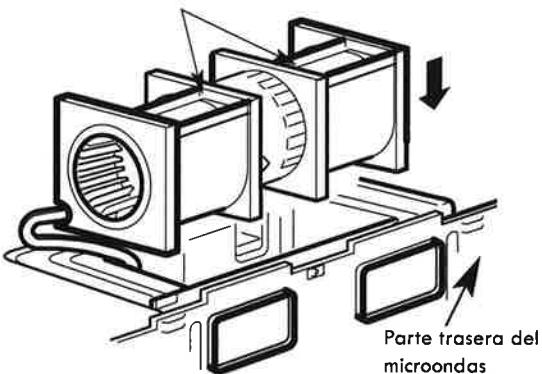
Después de girar



Parte trasera del microondas Parte trasera del microondas

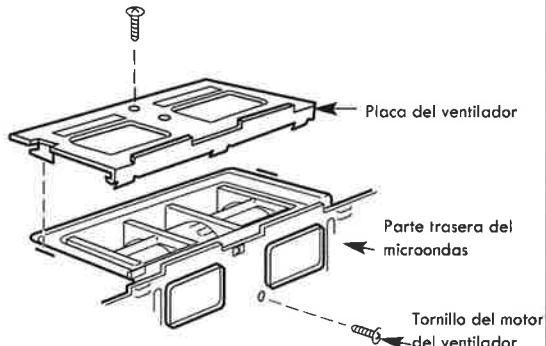
- 4** Vuelva a colocar el ventilador dentro de su abertura.

DESPUÉS: Aberturas de las aletas del ventilador orientadas hacia arriba



A3. AJUSTE DEL VENTILADOR DEL MICROONDAS PARA LA EXTRACCIÓN SUPERIOR EXTERNA

- 1** Coloque el microondas en posición vertical, con la parte superior hacia arriba.



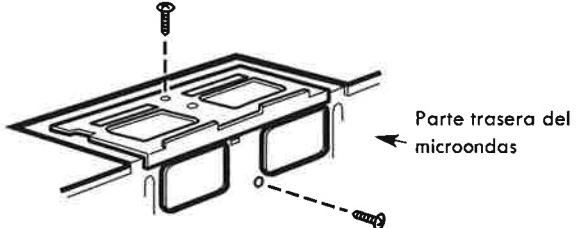
Quite el tornillo que sujetla la placa del ventilador al microondas. Quite y guarde el tornillo que sujetla el motor del ventilador al microondas.

PRECAUCIÓN: No tire hacia afuera ni estire los cables del ventilador. Asegúrese de que los cables no queden atrapados y que queden debidamente asegurados.

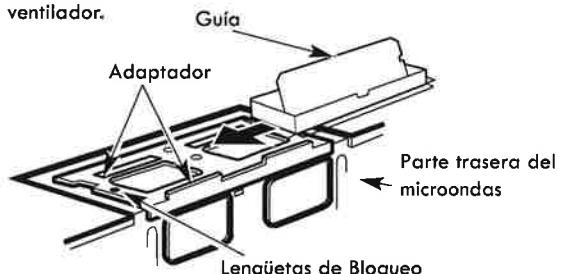
Instrucciones de instalación

A3. AJUSTE DEL VENTILADOR DEL MICROONDAS PARA LA EXTRACCIÓN SUPERIOR EXTERNA

- 5 Fije el ventilador al microondas con el tornillo previamente retirado en el paso 1. Asegúrese de apretar el tornillo.
- 6 Vuelva a fijar la placa del ventilador con el tornillo previamente retirado en el paso 1. Asegúrese de apretar el tornillo.



- 7 Instale el adaptador de extracción en la parte superior del placa del ventilador, deslizándolo por las guías situadas en la parte central superior de la parte superior del placa del ventilador.



Empuje hacia adentro hasta que encaje en las lengüetas de bloqueo inferiores. Tenga cuidado de asegurarse de que la bisagra del regulador de extracción esté instalada de manera que quede móvil libremente.

A4. VERIFICACIÓN DEL FUNCIONAMIENTO CORRECTO DEL REGULADOR DE EXTRACCIÓN



- Antes de instalar el microondas, asegúrese de que la cinta adhesiva que protege el regulador de extracción haya sido retirada y que el regulador se mueve fácilmente.
- Una vez instalado el microondas, necesitará realizar ajustes para asegurarse de lograr la alineación correcta con el conducto de extracción de la cocina.

A5. INSTALACIÓN DEL HORNO MICROONDAS



POR RAZONES DE SEGURIDAD PERSONAL Y PARA FACILITAR LA INSTALACIÓN, SE RECOMIENDA QUE DOS PERSONAS INSTALEN EL HORNO MICROONDAS.

IMPORTANTE: No agarre ni use la manija o el escudo térmico durante la instalación. No retire los separadores de cartón entre el escudo térmico y la puerta.

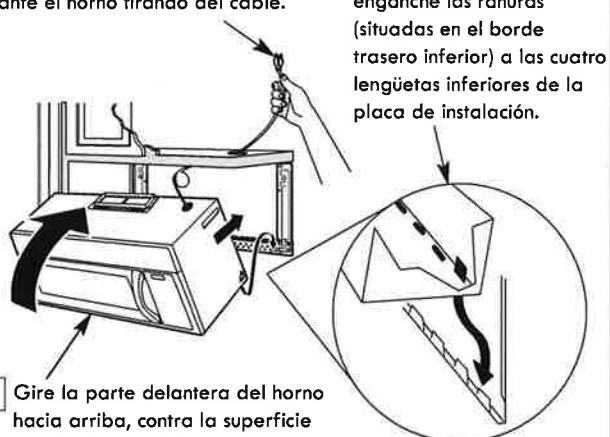
NOTA: si el gabinete es metálico, use una moldura aislante de nylon alrededor del agujero para el cable eléctrico, a fin de evitar cortes en el cable.

NOTA: se recomienda el uso de bloques de relleno si la parte delantera del gabinete sobresale debajo de la parte inferior del propio gabinete.

IMPORTANTE: Si no se usan bloques de relleno, pueden producirse daños en la carcasa por apretar demasiado los tornillos.

NOTA: cuando instale el horno microondas, eas el cable eléctrico a través del agujero correspondiente de la superficie inferior del gabinete superior. Mantenga tenso recto durante los pasos 1 a 3. No permita que el cable quede atrapado ni levante el horno tirando del cable.

- 1 Levante el microondas, inclínelo hacia adelante y enganche las ranuras (situadas en el borde trasero inferior) a las cuatro lengüetas inferiores de la placa de instalación.

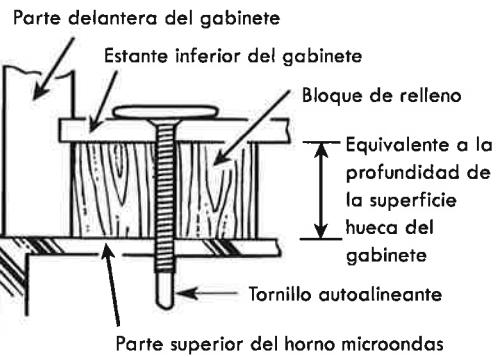


- 2 Gire la parte delantera del horno hacia arriba, contra la superficie inferior del gabinete.

- 3 Inserte un tornillo autoalineante a través del agujero del centro del gabinete superior. Fije temporalmente el horno apretando el tornillo al menos dos vueltas completas después de que el tornillo quede enroscado. (Más adelante se procederá a apretar completamente el tornillo.) Asegúrese de mantener tenso/recto el cable eléctrico. Tenga cuidado de evitar que el cable quede atrapado, especialmente al realizar la instalación del horno a ras contra la superficie inferior del gabinete.

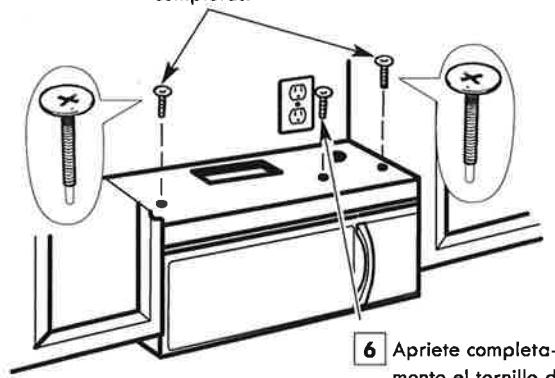
Instrucciones de instalación

A5. INSTALACIÓN DEL HORNO MICROONDAS (cont.)



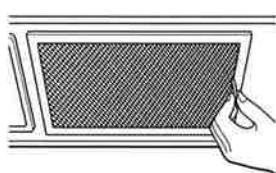
- 4 Fije el horno microondas al gabinete superior.

- 5 Inserte 2 tornillos autoalineantes a través de los agujeros exteriores del gabinete superior. Apriete cada uno de los tornillos dos vueltas completas.



- 6 Apriete completamente el tornillo del centro.

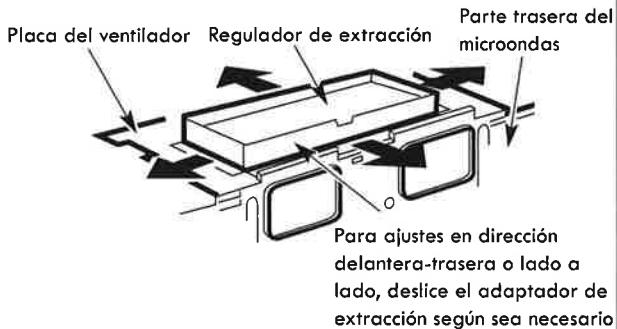
- 7 Apriete los dos tornillos externos a la parte superior del horno. (Mientras aprieta los tornillos, mantenga sujeto el horno contra la pared y el gabinete superior)



- 8 Instale los filtros de grasa. Consulte el Manual del usuario provisto con el microondas.

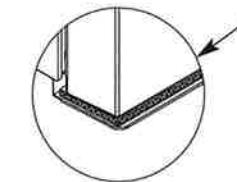
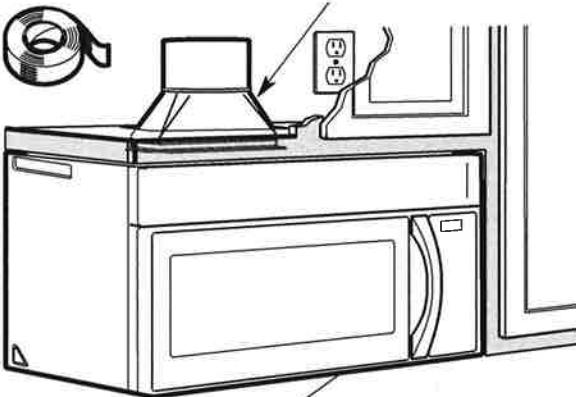
A6. AJUSTE DEL ADAPTADOR DE EXTRACCIÓN

Abra el gabinete superior y ajuste el adaptador de Extracción para acoplarlo al conducto de la cocina.



A7. ACOPLAMIENTO DEL SISTEMA DE CONDUCTOS

Conducto de la cocina



- 1 Extienda el conducto de la cocina para que se acople al adaptador de extracción.
2 Selle las uniones del conducto de escape usando cinta aislante para calefacción para altas temperaturas.

IMPORTANTE: retire los separadores de cartón entre el escudo térmico y la puerta

Instrucciones de instalación

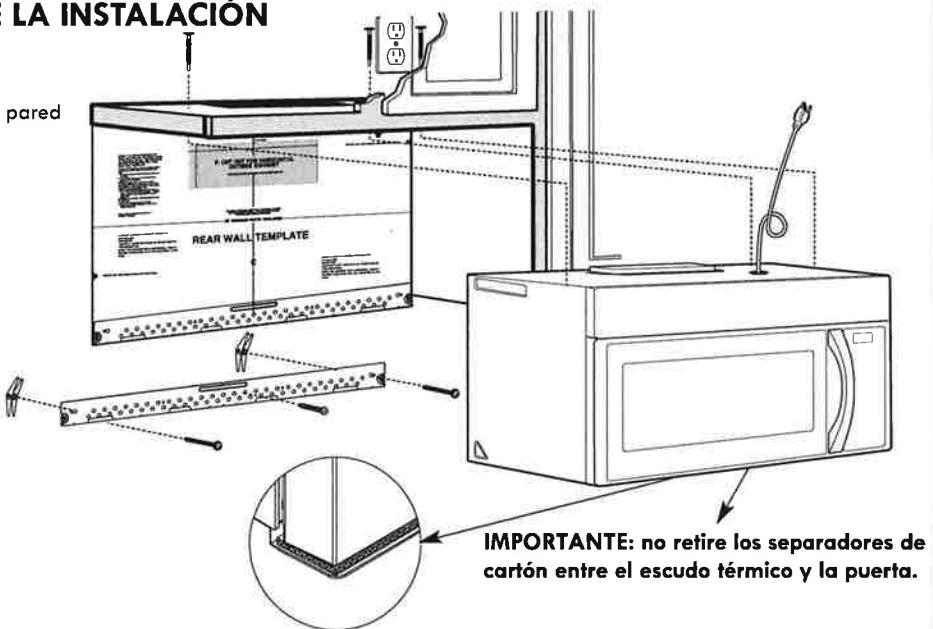
B EXTRACCIÓN TRASERA EXTERNA (Conducto Horizontal)

DESCRIPCIÓN GENERAL DE LA INSTALACIÓN

- B1. Preparación de la pared trasera
- B2. Desinstalación del placa del ventilador
- B3. Montaje de la placa de instalación en la pared
- B4. Preparación del gabinete superior
- B5. Ajuste del ventilador
- B6. Instalación del horno microondas

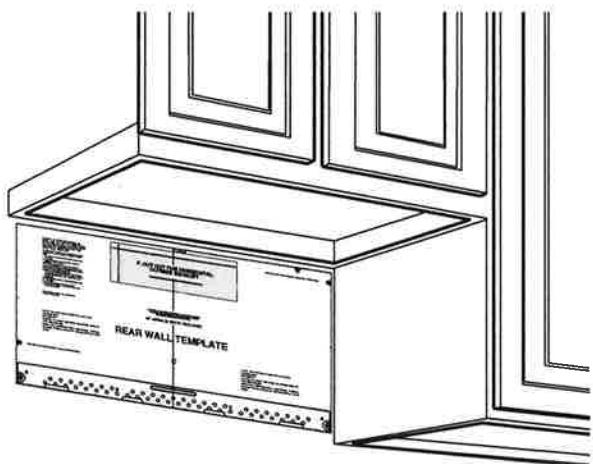
NOTAS IMPORTANTES:

- Asegúrese de que los tornillos del motor del ventilador y la placa del ventilador queden firmemente apretados al volver a instalarlos. Esto ayudará a prevenir el exceso de vibraciones.
- Asegúrese de que el cableado del motor quede debidamente orientado y asegurado, y que los cables no queden atrapados.



B1. PREPARACIÓN DE LA PARED TRASERA PARA LA SALIDA DE EXTRACCIÓN EXTERNA

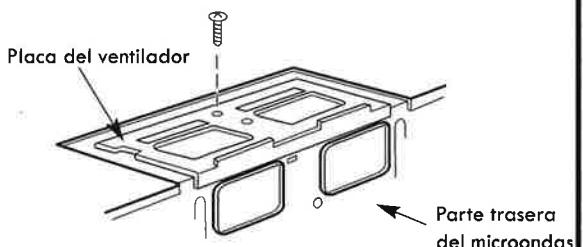
Es necesario realizar un corte en la pared trasera para crear una abertura para la salida de extracción externa.



- Lea las instrucciones de la sección PLANTILLA PARA LA PARED TRASERA.
- Adhiera con cinta la plantilla a la pared trasera, alineándola con los agujeros previamente taladrados para coincidir con los agujeros A y B en la placa para la pared.
- Realice el corte de la abertura, siguiendo las instrucciones de la sección PLANTILLA PARA LA PARED TRASERA.

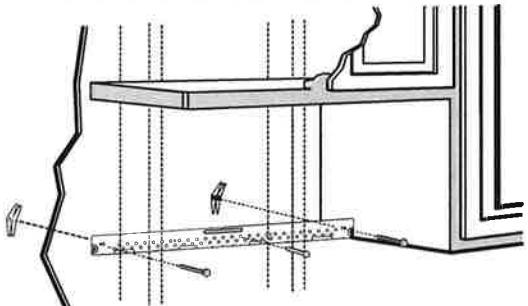
B2. DESINSTALACIÓN DEL PLACA DEL VENTILADOR

Quite y guarde el tornillo que sujetla la placa del ventilador al microondas. Levante la placa del ventilador para retirarla.



Instrucciones de instalación

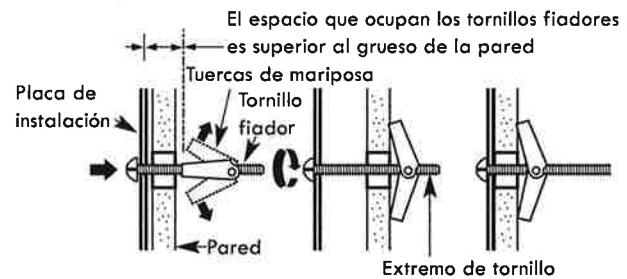
B3. MONTAJE DE INSTALACIÓN LA PLACA DE EN LA PARED



Fije la placa en la pared con los tornillos de fiador. Al menos un tornillo para madera debe ser utilizado para fijar la placa a una viga de la pared.

- 1 Quite las tuercas de mariposa de los tornillos.
- 2 Inserte los tornillos en la placa de instalación, a través de los agujeros taladrados en las partes de la pared que no son viga (los paneles) y vuelva a insertar las tuercas de mariposa hasta $3/4"$ (19 mm) de cada tornillo.

Para utilizar tornillos de fiador:



- 3 Coloque la placa de instalación contra la pared e inserte las tuercas de mariposa en los agujeros de la pared, a fin de instalar la placa.

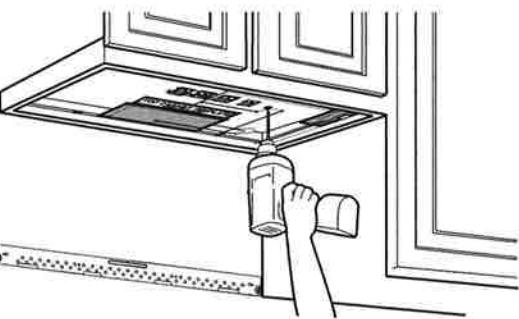
NOTA: antes de apretar los tornillos de fiador y el tornillo para madera, asegúrese de que las lengüetas de la placa de instalación toquen la parte inferior del gabinete cuando sean empujadas a ras contra la pared, y que la placa quede debidamente centrada bajo el gabinete.

PRECAUCIÓN: tenga cuidado de evitar que sus dedos queden atrapados entre la parte trasera de la placa de instalación y la pared.

- 4 Apriete todos los tornillos. Tire de la placa alejándola de la pared, a fin de que resulte más fácil apretar los tornillos.

B4. USO DE LA PLANTILLA PARA EL GABINETE SUPERIOR A FIN DE PREPARAR EL AREA DE DICHO GABINETE

Es necesario taladrar agujeros para los tornillos de soporte superior, así como un agujero lo suficientemente grande para que el cable eléctrico pueda pasar a través.

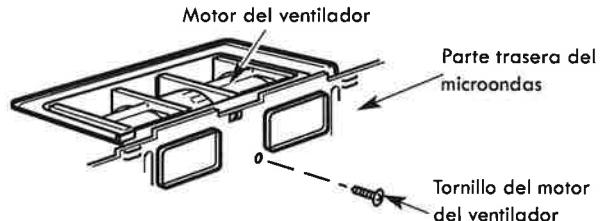


- Lea las instrucciones de la sección PLANTILLA PARA EL GABINETE SUPERIOR.
- Adhiera con cinta la plantilla al gabinete superior.
- Taladre los agujeros, siguiendo las instrucciones de la sección PLANTILLA PARA EL GABINETE SUPERIOR.

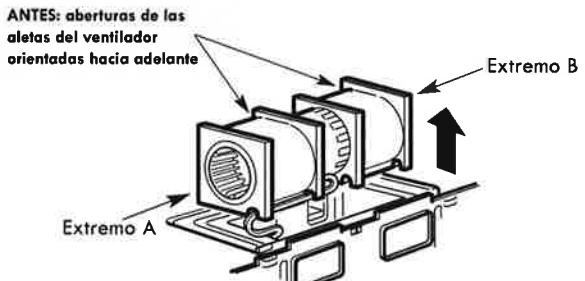
PRECAUCIÓN: cuando taladre los agujeros en la superficie inferior del gabinete, use gafas protectoras.

B5. AJUSTE DEL VENTILADOR DEL MICROONDAS PARA LA EXTRACCIÓN TRASERA EXTERNA

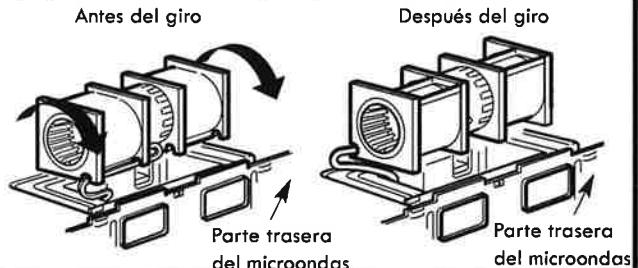
- 1 Quite y guarde el tornillo que sujeta el motor del ventilador al microondas.



- 2 Tire del ventilador con cuidado hacia afuera. Los cables se extenderán lo suficiente para permitir el ajuste del ventilador.



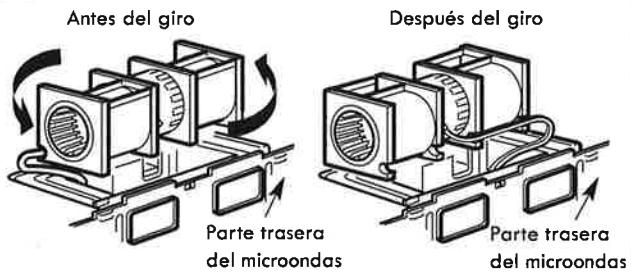
- 3 Gire el ventilador 90° .



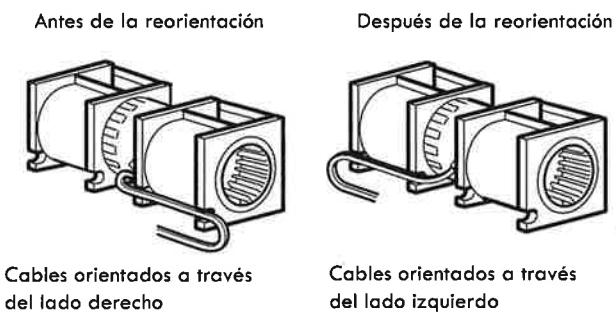
Instrucciones de instalación

B5. AJUSTE DEL VENTILADOR DEL MICROONDAS PARA LA EXTRACCIÓN TRASERA EXTERNA (cont.)

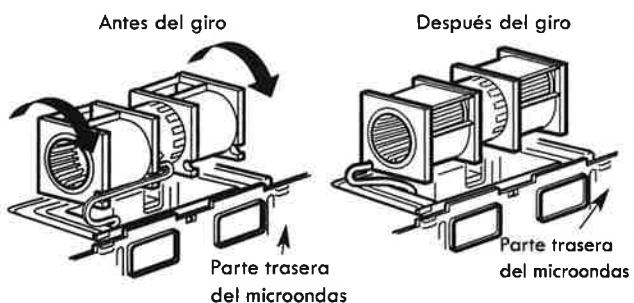
- 4 Gire el ventilador hacia la izquierda 180°.



- 5 Retire suavemente los cables de las ranuras. Reorienté los cables a través de las ranuras hacia el otro lado del ventilador.



- 6 Gire el ventilador 90°, de manera que las aberturas de las aletas del ventilador queden orientadas hacia la parte trasera del microondas.

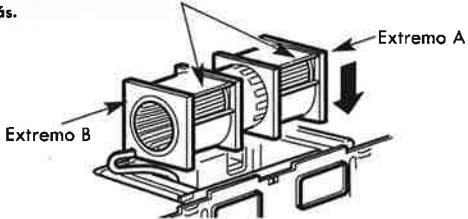


- 7 Retire las placas preperforadas en la parte trasera de la unidad con recortes. (Param algunos modelos)



- 8 Vuelva a colocar el ventilador dentro de su abertura.

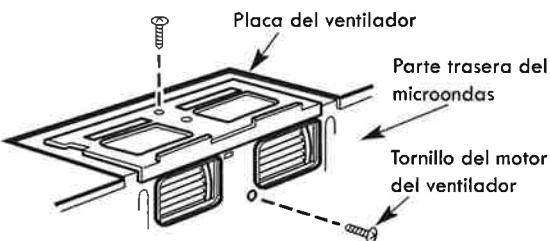
DESPUÉS: Aberturas de las aletas del ventilador orientadas hacia atrás.



PRECAUCIÓN: No tire hacia afuera ni estire los cables del ventilador. Asegúrese de que los cables no queden atrapados y que queden debidamente asegurados.

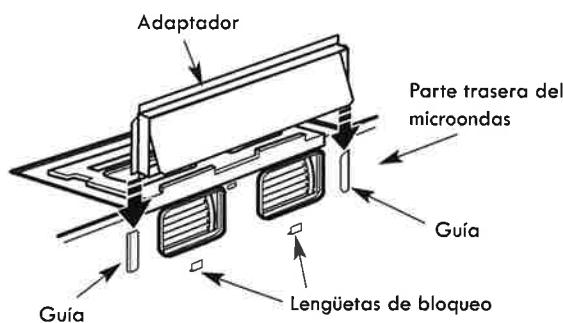
NOTA: Las aberturas de extracción del ventilador deben coincidir con las aberturas de extracción situadas en la parte trasera del horno.

- 9 Fije el ventilador al microondas con su tornillo original.



- 10 Vuelva a fijar (con el tornillo) la placa del ventilador en la misma posición en que estaba antes. Asegúrese de que el tornillo quede apretado.

- 11 Instale el adaptador de extracción en la parte trasera del horno, deslizándolo por las guías situadas en la parte central superior de la parte trasera del horno.



Empuje hacia adentro hasta que encaje en las lengüetas de bloqueo inferiores. Tenga cuidado de asegurarse de que la bisagra del regulador de extracción esté instalada de manera que quede en la parte superior y que se pueda mover libremente.

Instrucciones de instalación

B6. INSTALACIÓN DEL HORNO MICROONDAS



POR RAZONES DE SEGURIDAD PERSONAL Y PARA FACILITAR LA INSTALACIÓN, SE RECOMIENDA QUE DOS PERSONAS INSTALEN EL HORNO MICROONDAS.

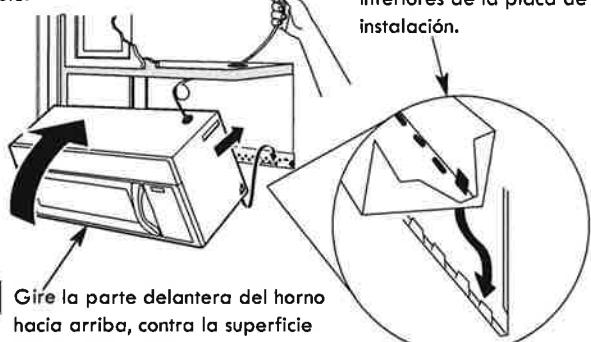
IMPORTANTE: No agarre ni use la manija o el escudo térmico durante la instalación. No retire los separadores de cartón entre el escudo térmico y la puerta.

NOTA: Si el gabinete es metálico, use una moldura aislante de nylon alrededor del agujero para el cable eléctrico, a fin de evitar cortes en el cable.

NOTA: Se recomienda el uso de bloques de relleno si la parte delantera del gabinete sobresale debajo del estante inferior del gabinete.

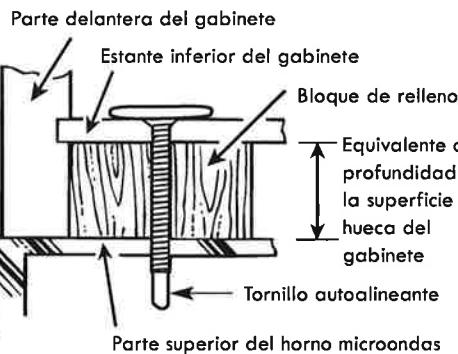
IMPORTANTE: Si no se usan bloques de relleno, pueden producirse daños en la carcasa por apretar demasiado los tornillos.

NOTA: cuando instale el horno microondas, pase el cable eléctrico a través del agujero correspondiente de la superficie inferior del gabinete superior. Manténgalo tenso/recto durante los pasos 1 a 3. No permita que el cable quede atrapado ni levante el horno tirando del cable.



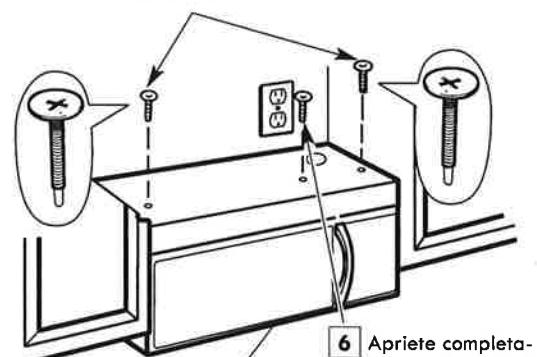
2 Gire la parte delantera del horno hacia arriba, contra la superficie inferior del gabinete.

3 Inserte un tornillo autoalineante a través del agujero del centro del gabinete superior: Fije temporalmente el horno apretando el tornillo al menos **dos vueltas completas** despisés de que el tornillo quede enroscado. (Más adelante se procederá a apretar completamente el tornillo.) **Asegúrese de mantener tenso/recto el cable eléctrico. Tenga cuidado de evitar que el cable quede atrapado, especialmente al realizar la instalación del horno a ras contra la superficie inferior del gabinete.**



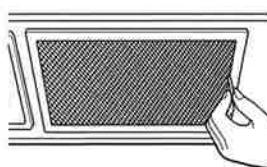
4 Fije el horno microondas al gabinete superior.

5 Inserte 2 tornillos autoalineantes a través de los agujeros exteriores del gabinete superior. Apriete cada uno de los tornillos dos vueltas completas.



6 Apriete completamente el tornillo del centro.

7 Apriete los dos tornillos externos a la parte superior del horno. (Mientras aprieta los tornillos, mantenga sujeto el horno contra la pared y el gabinete superior)



8 Instale los filtros de grasa. Consulte el Manual del usuario provisto con el microondas.

IMPORTANTE: retire los separadores de cartón entre el escudo térmico y la puerta

Instrucciones de instalación

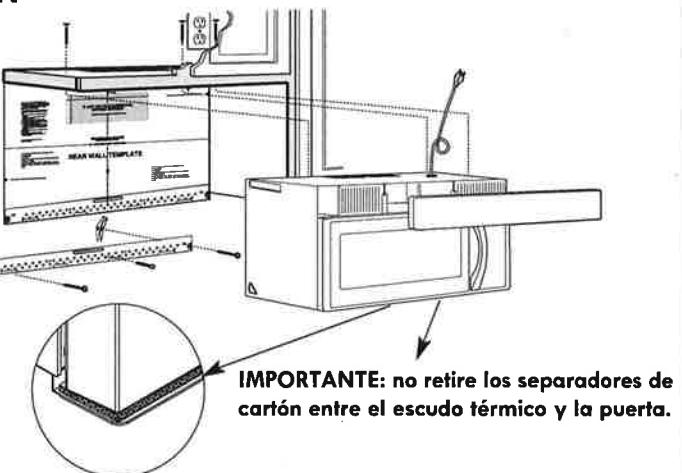
C RECIRCULACIÓN (Sin Conducto De Extracción)

DESCRIPCIÓN GENERAL DE LA INSTALACIÓN

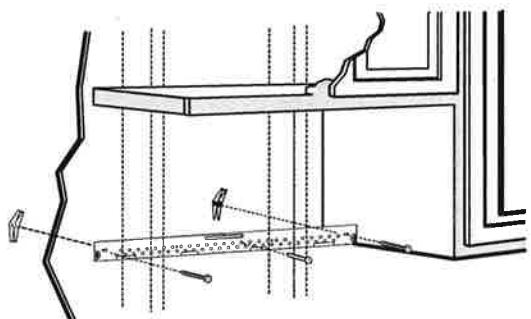
- C1. Montaje de la placa de instalación en la pared
- C2. Preparación del gabinete superior
- C3. Verificación del conjunto del Placa del Ventilador
- C4. Instalación del horno microondas
- C5. Instalación o cambiar del filtro de carbón

NOTAS IMPORTANTES:

- Asegúrese de que los tornillos del motor del ventilador y la placa del ventilador queden firmemente apretados al volver a instalarlos. Esto ayudará a prevenir el exceso de vibraciones.
- Asegúrese de que el cableado del motor quede debidamente orientado y asegurado, y que los cables no queden atrapados.

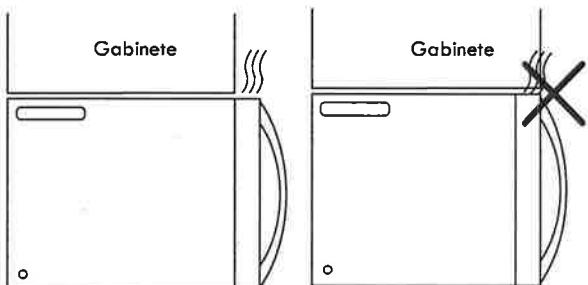


C1. MONTAJE DE LA PLACA DE INSTALACIÓN EN LA PARED



Fije la placa en la pared con los tornillos de fiador. Al menos un tornillo para madera debe ser utilizado para fijar la placa a una viga de la pared.

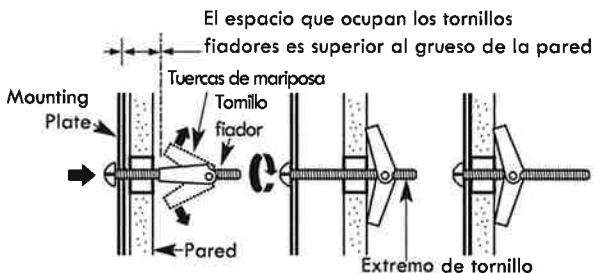
NOTA: Si la profundidad del gabinete incluyendo las puertas es mayor de 13" entonces la unidad debe alejarse de la pared con materiales adecuados que soporten 150 lbs para permitir una ventilación adecuada/toma de aire.



1 Quite las tuercas de mariposa de los tornillos.

2 Inserte los tornillos en la placa de instalación, a través de los agujeros taladrados en las partes de la pared que no son viga (los paneles) y vuelva a insertar las tuercas de mariposa hasta 3/4" (19 mm) de cada tornillo.

Para utilizar tornillos de fiador:



3 Coloque la placa de instalación contra la pared e inserte las tuercas de mariposa en los agujeros de la pared, a fin de instalar la placa.

NOTA: Antes de apretar los tornillos de fiador y el tornillo para madera, asegúrese de que las lengüetas de la placa de instalación toquen la parte inferior del gabinete cuando sean empujadas a ras contra la pared, y que la placa quede debidamente centrada bajo el gabinete.

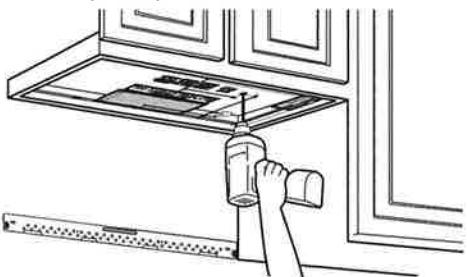
PRECAUCIÓN: Tenga cuidado de evitar que sus dedos queden atrapados entre la parte trasera de la placa de instalación y la pared.

4 Apriete todos los tornillos. Tire de la placa alejándola de la pared, a fin de que resulte más fácil apretar los tornillos.

Instrucciones de instalación

C2. USO DE LA PLANTILLA PARA EL GABINETE SUPERIOR A FIN DE PREPARAR EL ÁREA DE DICHO GABINETE

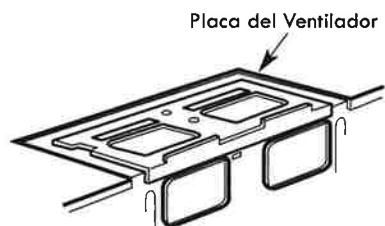
Es necesario taladrar agujeros para los tornillos de soporte superior, así como un agujero lo suficientemente grande para que el cable eléctrico pueda pasar a través.



- Lea las instrucciones de la sección PLANTILLA PARA EL GABINETE SUPERIOR.
 - Adhiera con cinta la plantilla al gabinete superior.
- NOTA:** Ajuste la placa superior de acuerdo a si el microondas está siendo separado de la pared debido a la profundidad del gabinete (más de 13").
- Taladre los agujeros, siguiendo las instrucciones de la sección PLANTILLA PARA EL GABINETE SUPERIOR.

PRECAUCIÓN: cuando taladre los agujeros en la superficie inferior del gabinete, use gafas protectoras.

C3. VERIFICACIÓN DEL CONJUNTO DEL PLACA DEL VENTILADOR



- Coloque el microondas en posición vertical, con la parte superior hacia arriba.
- Chequear si el placa del ventilador está instalado correctamente en el horno.

C4. INSTALACIÓN DEL HORNO MICROONDAS



POR RAZONES DE SEGURIDAD PERSONAL Y PARA FACILITAR LA INSTALACIÓN, SE RECOMIENDA QUE DOS PERSONAS INSTALEN EL HORNO MICROONDAS.

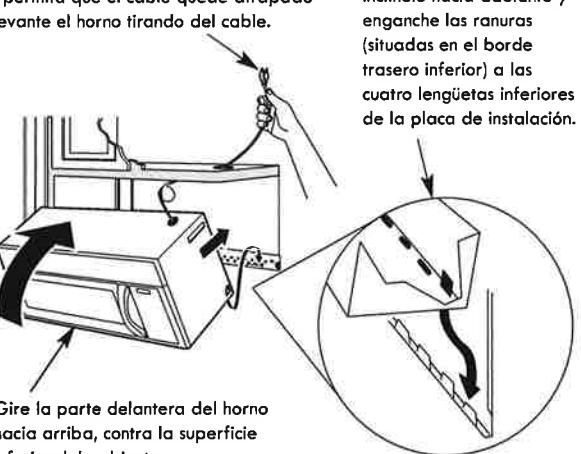
IMPORTANTE: No agarre ni use la manija o el escudo térmico durante la instalación. No retire los separadores de cartón entre el escudo térmico y la puerta.

NOTA: Si el gabinete es metálico, use una moldura aislante de nylon alrededor del agujero para el cable eléctrico, a fin de evitar cortes en el cable.

NOTA: Se recomienda el uso de bloques de relleno si la parte delantera del gabinete sobresale debajo del estante inferior del gabinete.

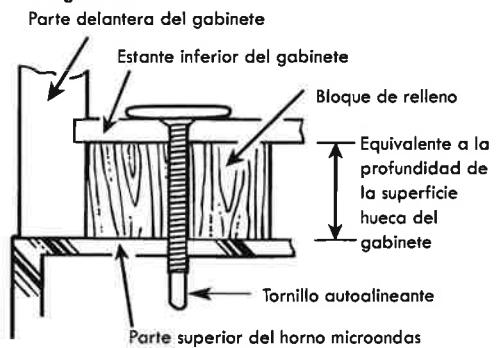
IMPORTANTE: Si no se usan bloques de relleno, pueden producirse daños en la carcasa por apretar demasiado los tornillos.

NOTA: cuando instale el horno microondas, pase el cable eléctrico a través del agujero correspondiente de la superficie inferior del gabinete superior. Manténgalo tenso/recto durante los pasos 1 a 3. No permita que el cable quede atrapado ni levante el horno tirando del cable.



- 1** Levante el microondas, inclínelo hacia adelante y enganche las ranuras (situadas en el borde trasero inferior) a las cuatro lengüetas inferiores de la placa de instalación.

- 2** Gire la parte delantera del horno hacia arriba, contra la superficie inferior del gabinete.
- 3** Inserte un tornillo autoalineante a través del agujero del centro del gabinete superior. Fije temporalmente el horno apretando el tornillo al menos dos vueltas completas despisés de que el tornillo quede enroscado. (Más adelante se procederá a apretar completamente el tornillo.) Asegúrese de mantener tenso/recto el cable eléctrico. Tenga cuidado de evitar que el cable quede atrapado, especialmente al realizar la instalación del horno a ras contra la superficie inferior del gabinete.

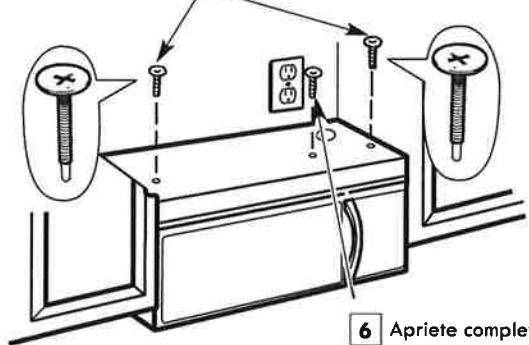


- 4** Fije el horno microondas al gabinete superior.

Instrucciones de instalación

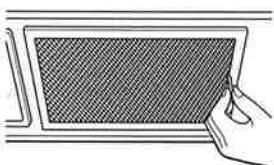
C4. INSTALACIÓN DEL HORNO MICROONDAS (cont.)

- 5** Inserte 2 tornillos autoalineantes a través de los agujeros exteriores del gabinete superior. Apriete cada uno de los tornillos dos vueltas completas.



- 6** Apriete completamente el tornillo del centro.

- 7** Apriete los dos tornillos externos a la parte superior del horno. (Mientras aprieta los tornillos, mantenga sujeto el horno contra la pared y el gabinete superior.)



- 8** Instale los filtros de grasa. Consulte el Manual del usuario provisto con el microondas.

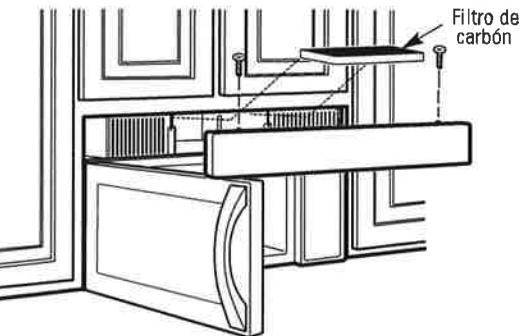
C5. Instalación o cambiar del filtro de carbón (Algunos Modelos)

NOTA: El filtro de carbón está instalado de fábrica en algunos modelos. Consulte la sección Uso y cuidado para ver si su dispositivo lo tiene y para leer información sobre su remplazo.

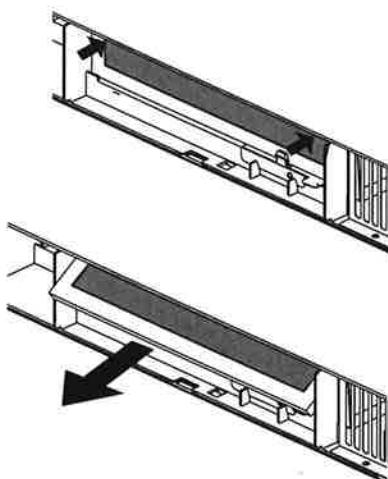
Para el modelo sin la puerta de acceso al filtro de recirculación, siga las instrucciones para remplazar o instalar un filtro de carbon.

- 1** Desconecte el microondas del suministro eléctrico.

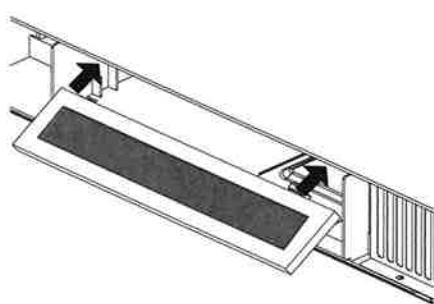
- 2** Abra la puerta del microondas y saque los dos tornillos de montaje de ventilación ubicados en la parte superior del horno con un destornillador Phillips #1.



- 3** Quitar el filtro de carbón, empujando la parte superior del filtro hacia dentro, luego tire de él hacia adelante desde la unidad.

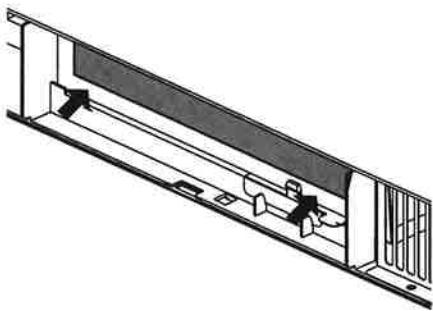


- 4** Deslice la parte superior del nuevo filtro de carbón en la parte superior de la cavidad del filtro.

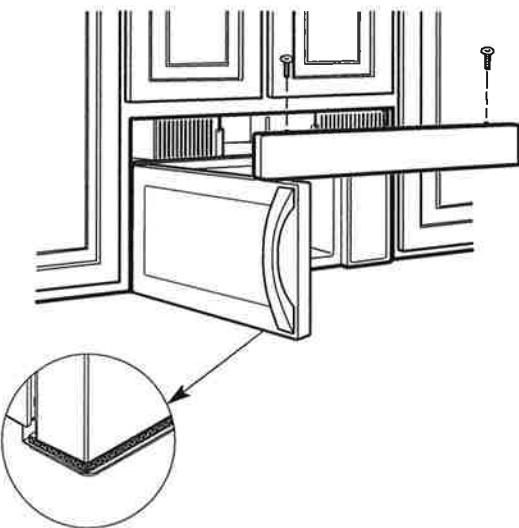


Instrucciones de instalación

- 5** Presione la parte inferior del filtro de carbón para colocarlo en la posición correcta.



- 6** Reinstale el ducto deslizando la parte inferior del mismo hacia su lugar. Empuje la parte superior en su posición y deslicela hacia la derecha. Reemplace los dos tornillos ubicados en la parte superior utilizando un destornillador Phillips #1.



- 7** Cierre la puerta del microondas. Enchúgelo o reconecte la energía eléctrica.

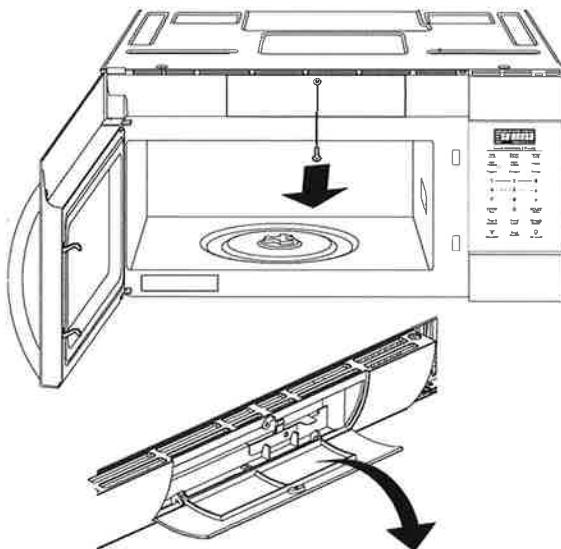
IMPORTANTE: retire los separadores de cartón entre el escudo térmico y la puerta

Para el modelo con la puerta de acceso al filtro de recirculación, siga las instrucciones para remplazar o instalar un filtro PureAir®.

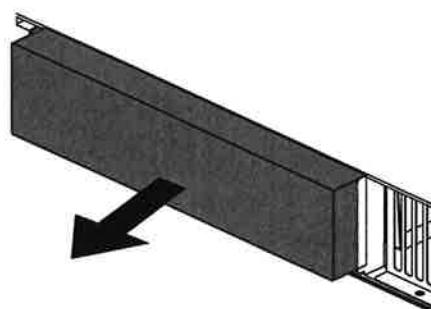
- 1** Quite el filtro PureAir del empaque y sacudir para quitar el exceso de carbón.

- 2** Utilice un destornillador Phillips para desatornillar la puerta de acceso del filtro PureAir®.

- 3** Abra la puerta de acceso.

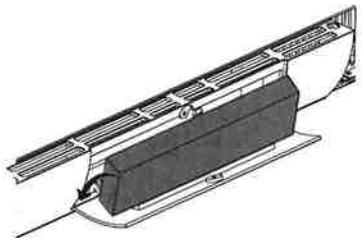


- 4** Quite el filtro PureAir® antiguo (si lo hay) tirando hacia afuera.



Instrucciones de instalación

- 5** Coloque el nuevo filtro PureAir® en la ranura detrás de la puerta en un ángulo hasta que esté en posición vertical y firmemente colocado en su sitio.



- 6** Asegúrese de que el filtro PureAir® esté instalado verticalmente en la ranura. Cierre la puerta de acceso y vuelva a atornillar, y el filtro PureAir® estará listo para usar.

Instrucciones de instalación

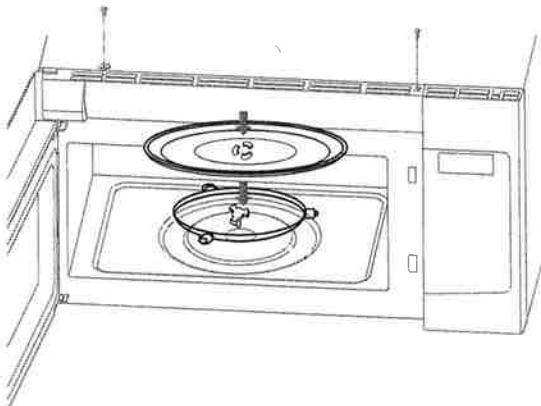
ANTES DE USAR EL HORNO MICROONDAS

- 1.** Asegúrese de que el horno microondas haya sido instalado según las instrucciones.



- 2.** Retire todo el material de empaque del horno microondas.

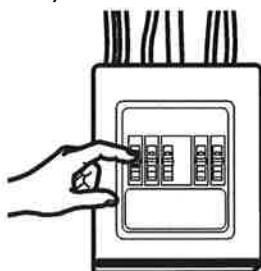
- 3.** Instale el anillo y el plato giratorio en el interior del horno.



- 4.** Conecte el cable de alimentación a un tomacorriente exclusivo (dedicado) de 15 a 20 amperios.



- 5.** Vuelva a colocar el fusible correspondiente o encienda de nuevo el disyuntor.



- 6.** Lea el manual de uso y cuidado.



- 7.** CONSERVE LAS INSTRUCCIONES DE INSTALACIÓN PARA USO DEL INSPECTOR LOCAL.



- 8.** LIENE LA TARJETA DE REGISTRO DEL PRODUCTO.



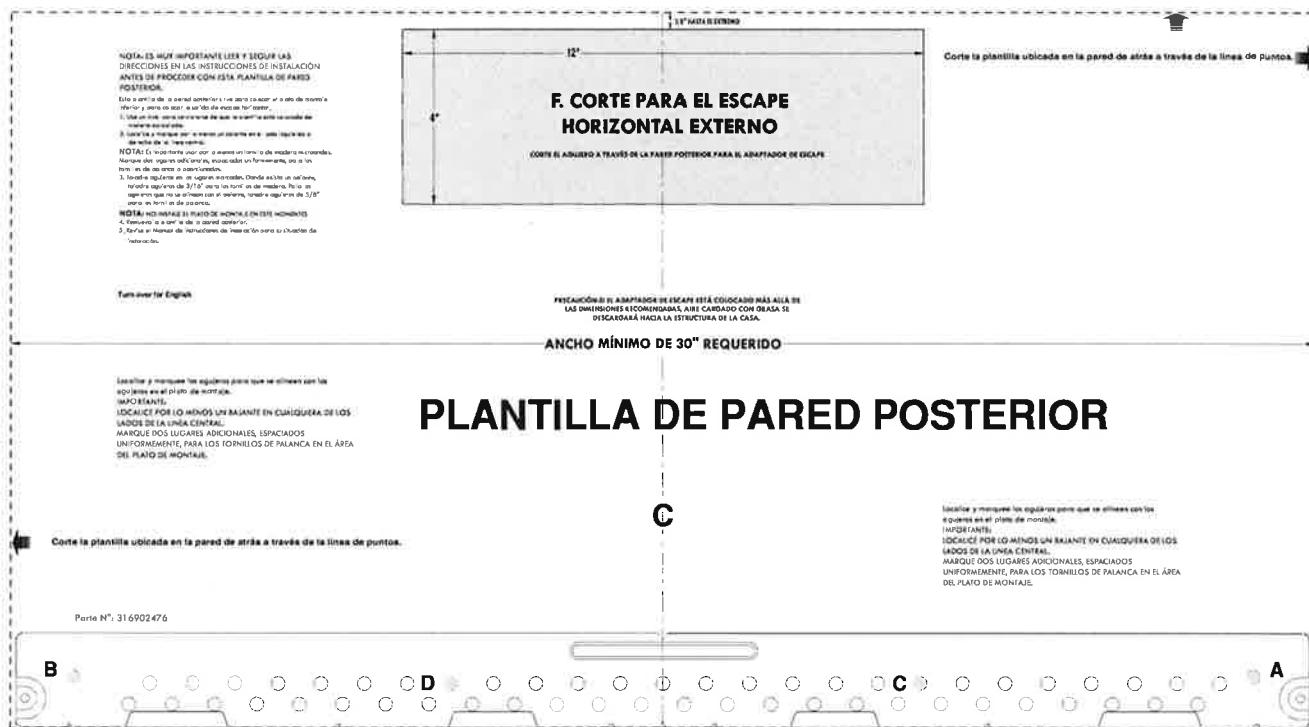


EXHIBIT B



Designation: C1055 – 03 (Reapproved 2014)

Standard Guide for Heated System Surface Conditions that Produce Contact Burn Injuries¹

This standard is issued under the fixed designation C1055; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide covers a process for the determination of acceptable surface operating conditions for heated systems. The human burn hazard is defined, and methods are presented for use in the design or evaluation of heated systems to prevent serious injury from contact with the exposed surfaces.

1.2 The maximum acceptable temperature for a particular surface is derived from an estimate of the possible or probable contact time, the surface system configuration, and the level of injury deemed acceptable for a particular situation.

1.3 For design purposes, the probable contact time for industrial situations has been established at 5 s. For consumer products, a longer (60-s) contact time has been proposed by Wu (1)² and others to reflect the slower reaction times for children, the elderly, or the infirm.

1.4 The maximum level of injury recommended here is that causing first degree burns on the *average* subject. This type of injury is reversible and causes no permanent tissue damage. For cases where more severe conditions are mandated (by space, economic, exposure probability, or other outside considerations), this guide may be used to establish a second, less desirable injury level (second degree burns), where some permanent tissue damage can be permitted. At no time, however, are conditions that produce third degree burns recommended.

1.5 This guide addresses the skin contact temperature determination for passive heated surfaces only. The guidelines contained herein are not applicable to chemical, electrical, or other similar hazards that provide a heat generation source at the location of contact.

1.6 A bibliography of human burn evaluation studies and surface hazard measurement is provided in the list of references at the end of this guide (1-16).

¹ This guide is under the jurisdiction of ASTM Committee C16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.30 on Thermal Measurement.

Current edition approved Feb 1, 2014. Published March 2014. Originally approved in 1986. Last previous edition approved in 2009 as C1055-03(2009). DOI: 10.1520/C1055-03R14

² The boldface numbers in parentheses refer to the list of references at the end of this guide.

1.7 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.8 *This standard does not purport to address all the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.*

2. Referenced Documents

2.1 ASTM Standards:³

C680 Practice for Estimate of the Heat Gain or Loss and the Surface Temperatures of Insulated Flat, Cylindrical, and Spherical Systems by Use of Computer Programs

C1057 Practice for Determination of Skin Contact Temperature from Heated Surfaces Using a Mathematical Model and Thermesthesiarometer

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *skin*:

3.1.2 *epidermis*—the outermost layer of skin cells. This layer contains no vascular or nerve cells and acts to protect the skin layers. The thickness of this layer averages 0.08 mm.

3.1.3 *dermis*—the second layer of skin tissue. This layer contains the blood vessels and nerve endings. The thickness of this layer averages 2 mm.

3.1.4 *necrosis*—localized death of living cells. A clinical term that defines when permanent damage to a skin layer has occurred.

3.1.5 *burns*:

3.1.6 *first degree burn*—the reaction to an exposure where the intensity or duration is insufficient to cause complete necrosis of the epidermis. The normal response to this level of exposure is dilation of the superficial blood vessels (reddening of the skin).

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

 C1055 – 03 (2014)

3.1.7 *second degree burn*—the reaction to an exposure where the intensity and duration is sufficient to cause complete necrosis of the epidermis but no significant damage to the dermis. The normal response to this exposure is blistering of the epidermis.

3.1.8 *third degree burn*—the reaction to an exposure where significant dermal necrosis occurs. Significant dermal necrosis has been defined in the literature (3) as 75% destruction of the dermis. The normal response to this exposure is open sores that leave permanent scar tissue upon healing.

3.1.9 *contact exposure*—the process by which the surface of skin makes intimate contact with a heated surface such that no insulating layer, film, moisture, etc., interferes with the rapid transfer of available energy.

3.1.10 *insulation system*—the combination of an insulation material or jacket, or both that forms a barrier to the rapid loss of energy from a heated surface. The insulation system may involve a broad range of types and configurations of materials.

3.1.11 *jacket*—the protective barrier placed on the exposed side of an insulation to protect the insulation from deterioration or abuse. The jacket material can be made of paper, plastic, metal, canvas cloth, or combinations of the above or similar materials.

3.1.12 *thermesthesiometer*—a probe device developed by Marzetta (13) that simulates the thermal physical response of the human finger to contact with heated surfaces.

4. Summary of Guide

4.1 This guide establishes a means by which the engineer, designer, or operator can determine the acceptable surface temperature of an existing system where skin contact may be made with a heated surface.

4.2 The process used in the analysis follows the outline listed below:

4.2.1 The user must first establish the acceptable contact exposure time and the level of acceptable injury for the particular system in question.

4.2.2 Secondly, the user determines the maximum operating surface temperature. This determination is made either by direct measurement (if possible) or by use of a calculation at design conditions using a method conforming to Practice C680.

4.2.3 Next, utilizing the contact time (4.2.1), the maximum surface temperature (4.2.2), and the graph, Fig. 1, the user determines the potential injury level. If the operating point falls below the injury level specified (4.2.1), then no further analysis is required. (See Note 1.)

NOTE 1—The following equations have been developed from the original data used to generate Fig. 1 for easier use of this figure.

$$T_A = 15.005 + 0.51907 \times \ln(\text{time} \times 1000) + 352.97 / (\ln(\text{time} \times 1000)) \quad (1)$$

$$T_B = 39.468 - 0.41352 \times \ln(\text{time} \times 1000) + 190.60 / (\ln(\text{time} \times 1000)) \quad (2)$$

where:

T_A = critical contact temperature for complete transepidermal necrosis, °C.

T_B = critical contact temperature for reversible epidermal injury, °C.

time = elapsed contact time, s.

\ln = natural logarithm.

4.2.4 If the injury level exceeds that specified, further analysis of the system is required using either the thermesthesiometer (a direct method) or an additional calculation. Both methods are described in Practice C1057.

4.2.5 If after this additional analysis the system still exceeds the injury level criterion, then the system is unacceptable for the criterion specified and the design should be revised.

5. Significance and Use

5.1 Most heated apparatus in industrial, commercial, and residential service are insulated, unless thermal insulation would interfere with their function; for example, it is inappropriate to insulate the bottom surface of a flatiron. However, surface temperatures of insulated equipment and appliances

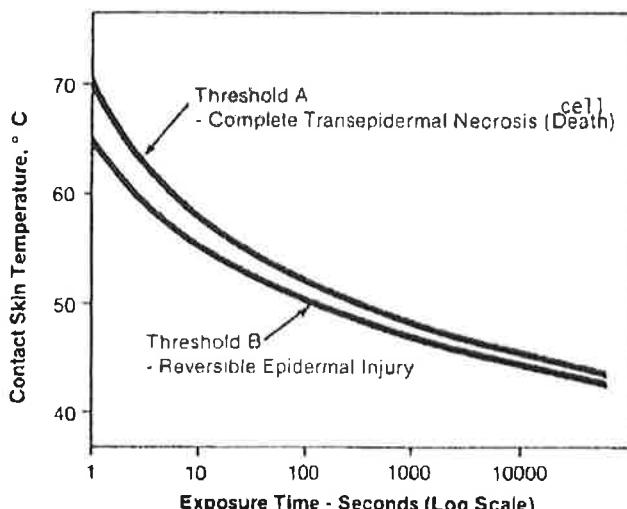


FIG. 1 Temperature-Time Relationship for Burns

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may still be high enough to cause burns from contact exposure under certain conditions.

5.2 This guide has been developed to standardize the determination of acceptable surface operating conditions for heated systems. Current practice for this determination is widely varied. The intent of this guide is to tie together the existing practices into a consensus standard based upon scientific understanding of the thermal physics involved. Flexibility is retained within this guide for the designer, regulator, or consumer to establish specific burn hazard criteria. Most generally, the regulated criterion will be the length of time of contact exposure.

5.3 It is beyond the scope of this guide to establish appropriate contact times and acceptable levels of injury for particular situations, or determine what surface temperature is "safe." Clearly, quite different criteria may be justified for cases as diverse as those involving infants and domestic appliances, and experienced adults and industrial equipment. In the first case, no more than first degree burns in 60 s might be desirable. In the second case, second degree burns in 5 s might be acceptable.

Note 2—An overview of the medical research leading to the development of this guide was presented at the ASTM Conference on Thermal Insulation, Materials and Systems on Dec. 7, 1984 (14).

5.4 This guide is meant to serve only as an estimation of the exposure to which an *average* individual might be subjected. Unusual conditions of exposure, physical health variations, or nonstandard ambients all serve to modify the results.

5.5 This guide is limited to contact exposure to heated surfaces only. It should be noted that conditions of personal exposure to periods of high ambient temperature or high radiant fluxes may cause human injury with no direct contact.

5.6 This guide is not intended to cover hazards for cold-temperature exposure, that is, refrigeration or cryogenic applications.

5.7 The procedure found in this guide has been described in the literature as applicable to all heated surfaces. For extremely high-temperature metallic surfaces ($>70^{\circ}\text{C}$), damage occurs almost instantaneously upon contact.

6. Procedure

6.1 This procedure requires the user to make several decisions that are based upon the results obtained. Careful documentation of the rationale for each decision and intermediate result is an important part of this evaluation process.

6.2 The first phase in the use of this guide is to establish the acceptable limits for contact exposure time and the acceptable level of injury for the system in question. Where no available standards for these limits are prescribed, the following limits are recommended based upon a survey of the existing medical literature.

6.2.1 Acceptable Contact Times:

6.2.1.1 *Industrial Process*—5 s.

6.2.1.2 *Consumer Items*—60 s.

6.2.2 *Acceptable Injury Levels*—The acceptable injury level is that of first degree burns as defined in 3.1.6 and is the limit represented by the bottom curve in Fig. 1.

6.3 The next phase in the process is to establish the maximum operating surface temperature under worst case conditions. This evaluation may be made either by direct measurement (but only at worst case conditions) or by using a calculation approximation. The steps required for determining the maximum surface temperature are as follows:

6.3.1 The initial step is to establish the operating system parameters. This step provides input information to the analysis and may preclude any further work concerning burn hazard. The items that need to be identified and recorded are as follows:

6.3.1.1 *System Description*—Shape, size, materials, including jacket material, thickness, and surface emittance.

6.3.1.2 *Operation Conditions*—Temperatures of heated system, times of year, cycle, etc.

6.3.1.3 *Ambient Conditions*—Worst case design temperature for burn hazards would be summer design dry bulb. Or, for inside conditions, the maximum expected room ambient air temperature. Include the ambient air velocity, if known.

Note 3—Design conditions for burn hazard evaluation may be different from those used for heat loss analysis. For example, the highest ambient is used for burn hazard analysis versus the lowest for heat loss.

6.3.2 The second step is to determine the temperature of the system surface at the *worst* design condition by one of the following methods.

6.3.2.1 Insert the system dimensions, material properties, and operating conditions into an analysis technique conforming to Practice C680. This technique should be used during design or where the system surface temperatures cannot be physically measured at *worst case* conditions.

6.3.2.2 Direct contact thermometry (thermocouple or resistance device) or infrared, noncontact thermometry.

Note 4—(1) Care should be used in attaching measurement devices on hot systems since burns can result; and (2) Proper installation techniques must be used with direct contact thermometry to prevent heat sinking of the surface and obtaining incorrect temperature readings.

6.4 In many situations, surface temperatures exceed the range of applicability of this guide and thus the evaluation is made through interpretation of the surface temperature data and the system properties. The limiting conditions below should first be examined to see if further analysis is required.

6.4.1 If the surface temperature is below 44°C , no short term (that is, less than 6 h) hazard exists and the remaining sections can be ignored.

6.4.2 If the surface temperature exceeds 70°C and the surface is metallic, it may present a hazard regardless of contact duration. Attempts should be made to lower the surface temperature below 70°C . Nonmetallic skins may be safe for limited exposure at temperatures above 70°C . In these cases, as with all cases between 44°C and 70°C , the analysis should be completed.

6.5 With the measurement or estimation of surface temperature for the system in question, utilize the graph (Fig. 1) and

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check if the intersection of the operating surface temperature and the selected time of contact falls below the threshold temperature.

NOTE 5—The threshold temperature used will depend on the limits of acceptable burn chosen in 6.2.2. If the burn level is first degree, use threshold line B in Fig. 1. If second degree burns are acceptable, use threshold line A in Fig. 1.

6.6 If the operating surface temperature and time are below the threshold (line B) curve, then the system meets the selected criteria.

6.7 If, however, the point falls above the curve, the system may meet the selected criterion only if certain combinations of insulation or jacketing, or both, are used. Analysis procedures for the jacketing/insulation effects are outlined in Practice C1057. Two methods provided in Practice C1057 are briefly described below.

6.7.1 The calculation technique provided in Practice C1057 uses system geometry, material properties, and temperature conditions to estimate the maximum contact temperature used in Fig. 1 when the heat capacity effects of the surface are to be considered. Once this maximum contact temperature is determined, the user returns to steps 6.5 – 6.7 for the refined analysis.

6.7.2 An alternative to calculation of the contact temperature is available for those systems that are already operating. The thermesthesiometer (13) provides an analogue measurement of the same phenomenon as the computer method models (6.7.1). Care should be used in applying the thermesthesiometer since it must be applied at *worst case* conditions if the hazard potential is to be evaluated. Practice C1057 outlines the correct procedures for use of this device for surface hazard evaluation. The output from the thermesthesiometer is the maximum contact temperature of the skin that can be related to Fig. 1 with no corrections for surface type needed.

6.8 If, after analysis using Practice C1057, the system temperature still fails to meet the selected criterion, then increasing insulation, changing jacketing, or other means must be used to lower the surface temperature. Practice C680 will be helpful in determining the levels required.

6.9 Once a new level of jacket and insulation is determined, the analysis above should be repeated to confirm safe operating conditions.

7. Report

7.1 Any report citing the use of this guide should include the following information:

7.1.1 System description,

7.1.2 System operating conditions (either measured or design),

7.1.3 Ambient conditions (either measured or design),

7.1.4 Method of surface temperature evaluation used, calculation or measurement,

7.1.5 Method of analysis of hazard potential, calculation, thermesthesiometer, contact time, and hazard level selected, and

7.1.6 Statement of analysis of results and conclusions.

8. Precision and Bias

8.1 As stated in the Scope, this procedure is valid for the average person. Individuals may be tolerant or sensitive to burns depending upon physical condition, age, ambient conditions, emotional state, etc. The literature (1, 4, 5) has shown, however, agreement on pain response and tissue damage for a panel of subjects to within approximately 10 %.

9. Keywords

9.1 burns; epidermal injury; heat; injuries; skin contact temperatures; thermal insulation

APPENDIX

(Nonmandatory Information)

X1. RATIONALE

X1.1 Background—General

X1.1.1 Man has faced the potential of skin burns from touching hot surfaces since the discovery of fire in prehistoric times. He was concerned more with treatment of the injury than with the development of some means to prevent its occurrence. As civilization advanced, man developed crude insulation forms to control the extremes of heat to which he was exposed. The greatest improvement to these systems came since the industrial revolution where the use of high temperature power and process systems dictated the development of modern insulation systems, that not only conserve energy but also protect process products during manufacture. As technology expanded to include higher temperatures, more complex processes, and thus more worker exposure situations, worker

organizations and later governmental agencies demanded the increased use of insulation for personal protection.

X1.1.2 At the same time that the workplace was becoming more hazardous, the increased development of consumer products that heated, steamed, or cooked increased the potential hazards found in consumer products and forced the use of more insulation and protection for the operator. Personal protection now is required everywhere for consumer products. Examples include curling irons, ranges, irons, dryers, dishwashers, light fixtures, and furnace and heating fixtures.

X1.1.3 The obvious solution is to simply insulate the heated part and thus isolate the hazard from the user. Unfortunately, the random application of insulation without detailed analysis can sometimes disrupt the process (that is, overheating where

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some loss is desired) or be an economic handicap to the overall cost of the project. Most applications of insulation to heated process systems are made on the basis of trade-offs between the cost of the installed insulation and the cost of the energy lost. Using this criteria or the more common rule-of-thumb approach, that is, "put on about an inch like we always do," can create exposed surface temperatures that exceed even the shortest term human exposure limits. Thus, to protect both operators and casual visitors in an area, an analysis of the exposed surfaces must be undertaken to identify those having temperatures capable of causing burns.

X1.1.4 When consumer product and industrial system designers recognized the need to design for personnel safety, they established what they felt were safe operating limits for exposed surfaces. Since limited research data was available before 1950, many industries chose to establish their own standards for maximum surface temperatures based upon combinations of available research results and personal experience. This remains as the current method for the evaluation of surface hazards.

X1.1.5 In 1983, Committee C16 undertook the study of a proposal to establish a *standard* criteria for evaluating burn hazard potential. This standard was to be well documented and easily used. As an adjunct to this effort, a second standard was proposed to establish a means for evaluating existing or proposed systems for hazard level by either physical measurement or mathematical modeling.

X1.2 Background—Physiological Mechanism of a Burn

X1.2.1 Previous to World War II, little research has been performed in developing an understanding of the physiology of burns to the human body. With the increased destruction potential of more powerful weapons, burn injuries became a common battle problem and the military began to support research to study the relationships between burn damage and the severity of exposure. At that time, little was known about the mechanism by which hyperthermia (high temperature exposure) leads to irreversible damage. The chemical reactions occurring within the skin cells upon exposure and the relationships between exposure temperature and duration on the transfer of heat into the skin were also subjects of research.

X1.2.2 The first significant research on the subject was conducted by Henriques and Moritz at the Harvard Medical School (2, 3, 8, 9, 10, 11). The results were released for publication in 1946 through 1948. This research, performed primarily on swine (which happen to have similar skin properties to humans), with some human subjects added later,

helped define the significant parameters controlling the flow of heat into the skin. Later, the relationship between temperature and duration of exposure to the extent of damage observed was established to serve as a guide for future work. Some of the significant results of this initial work (2) are:

X1.2.2.1 The burning of human skin occurs as a complex, nonsteady heat transfer between a contacted medium, that is, a hot surface, and the surface of the skin. The rate of heating depends upon the temperature and heating capacity of the source and the heat capacity and thermal conductivity of the skin layers (see Fig. X1.1). Neglected in these studies were the flow of blood to carry heat away and the physiological changes in skin properties as the damaged zone traverses the outer skin layers.

X1.2.2.2 Factors that cause increased complexity of the problem include: (1) site variations with respect to the thickness of the different skin layers; (2) variations of initial conditions within the skin with respect to time, position, and physical condition of the subject; (3) the unknown average rate of blood flow through the skin layers and variations within the layers with respect to location and ambient temperatures (warm ambient causes increased flow near surface and cold ambient results in less flow near surface); and (4) the appearance of watery fluids in variable quantities upon exposure that result in alterations of skin density, heat capacity, thickness, and thermal conductivity.

X1.2.2.3 Analysis of the experimental results showed that it was possible to assume average conditions and to develop an approximate first order Fourier's law equation to describe the transient heat flow in the contact problem. The modeling work by Henriques neglected the influence of contact resistance and blood flow and assumed that both the skin and touched surface could be treated as semi-infinite. Succeeding experiments showed that the assumption of semi-infinite solids and neglecting blood flow were valid for the time/temperature conditions of interest. The experiments performed at Harvard used a direct contact water bath which avoided the issue of contact resistance.

X1.2.3 After their initial work was complete, Moritz and Henriques extended their work to include the effects on human skin of hyperthermia of varying duration and varying degrees of intensity. These studies (3) led to a clearer definition of the degree of burning. Several additional conclusions were forthcoming from that research and are outlined as follows:

X1.2.3.1 The pain reaction to prolonged hyperthermia exposure first occurs as a stinging sensation at between 47.5° and 48.5°C. The level of discomfort does not always correlate with

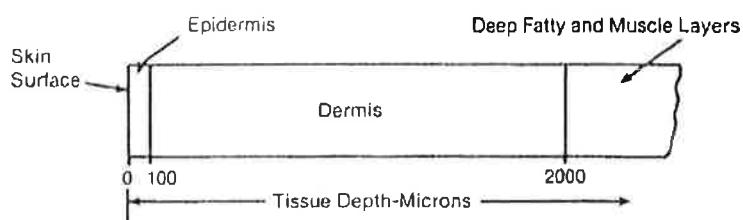


FIG. X1.1 Cross Section of Human Tissue

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the level of damage sustained or with intensity between subjects or the same subject on different days.

X1.2.3.2 The lowest temperature where epidermis (outside skin layer) damage occurs is approximately 44°C when it is sustained for approximately 6 h. It is possible to extrapolate this result to conclude that longer exposures might cause damages at temperatures below 44°C.

X1.2.3.3 As the temperatures of contact increase above 44°C, the time to damage is shortened by approximately 50% for each 1°C rise in temperature up to about 51°C.

X1.2.3.4 Testing showed that increasing the pressure of contact within an expected range was not sufficient to collapse the blood vessels and cause an increased vulnerability of the epidermis to thermal injury.

X1.2.3.5 At temperatures above 70°C, the rate of injury from a high capacity surface exceeds the body reaction time (less than 1 s to have completed epidermis cell death) such that the blood vessel location or flow has little effect on the level of burn.

X1.2.3.6 The level of skin damage to the duration and intensity of surface contact can be related by the following curve (Fig. 1). Exposures below the lower curve should not produce permanent injury in normal humans. Exposures between the curves are described as second-degree burns and have intermediate levels of cell damage. Exposures at levels above the top line are defined as third-degree burns that cause deep, permanent cell damage and scarring.

X1.2.3.7 After the initial research described above, several other researchers studied the same problems to extend the knowledge of burns to more realistic situations. Most significant here are problems with contact resistance and source surfaces having non-infinite thermal inertias. Wu (1) took the analysis developed by Moritz one step further by adding the heat transfer reaction for a source of high energy. His treatment, assuming contact between two semi-infinite bodies of finite thermal inertia (as measured by the square root of thermal diffusivity) at different temperatures, showed that sources of low inertia, for example, wood, insulation, and some

plastics, cause a slower rise in skin temperature than a source of high thermal inertia, for example, steel and aluminum, at the same temperature. In short, this is explained by observing that high thermal inertia materials can make more energy available at the surface in a given time than those of lesser thermal inertia.

X1.2.3.8 Wu also pointed out that cell death (necrosis) is a result of irreversible thermal denaturation of the protein present within the cell. This denaturation is a rate process having a very high temperature coefficient that corresponds to a very high activation energy. In short, the higher the temperature of exposure, the faster damage occurs. This explanation confirms the results of Henriques and Moritz. Wu also developed the information presented in Fig. X1.2 that outlines the relationship between the pain sensation, exposed skin color, tissue temperature at 80 µm depth, and cell process.

X1.2.3.9 Stoll (4) on the other hand, looked at the relationship between pain, reaction times, and injury and found approximately $\pm 10\%$ day-to-day variation in pain thresholds for individual human subjects. This research established a minimum time to sense the pain and react to it at any temperature to be a minimum of 0.3 s. For those situations where pain was reached beyond 0.3 s Stoll found that complete epidermal necrosis occurred at a time approximately 2.5 times the time for initial pain sensation.

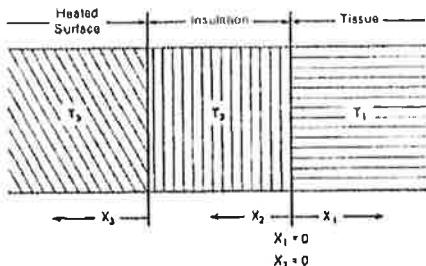
X1.2.3.10 Several years after his initial work, Wu (5) proposed a third model composed of three layers (see Fig. X1.3) so that the properties of the surface layer and the substrate could be different. This model describes the identical case to that of an insulation covered by a jacket material. The equations Wu developed are a basis for establishing an extrapolation of Moritz's work to real insulated systems.

X1.2.3.11 Wu also recommended that a 1-min exposure limit be used for design purposes for persons who have slow reactions (infants, elderly, or infirmed) or who freeze under severe hazard conditions. The influence of contact resistance was shown to also have significant effect. Hatton et al. (6) demonstrated that the results of Stoll on pain and blistering

Sensation	Skin Color	Tissue Temperature		Process	Injury
		deg. C	deg. F		
Numbness	White	72 68	162 160	Protein Coagulation	Irreversible
	Mottled Red and White	64 60	140 140	Thermal Inactivation of Tissue Contents	Possibly Reversible
Maximum Pain	Bright Red	56			
	Severe Pain	52			
Threshold Pain	Light Red	48			
		44			
Hot		40			
	Flushed	36			
Warm			93	Normal Metabolism	None
			32		

FIG. X1.2 Thermal Sensations and Associated Effects Throughout Range of Temperatures Compatible with Tissue Life

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Schematic of Heat Transfer Model**FIG. X1.3 Schematic of Heat Transfer Model**

times were better correlated if a finite contact resistance was included in the model. He defined pain as the point in which the interface between the epidermis and dermis reaches a temperature of 44°C. His improved correlations were accomplished using a surface coefficient of 1000 (W/m²·K); however, depending upon skin conditions, this coefficient could range down to as low as 10 (W/m²·K).

X1.2.3.12 Finally, McChesney (7) added a final point to the understanding of burn prevention when he suggested that some factor be included in the analysis to account for the heating wave which continues to penetrate the skin for some time after the contact is removed. He did not, however, venture a guess as to what that factor should be since it would depend upon the method of cooling the contact location on the skin.

X1.3 Background—C16 Activity

X1.3.1 In 1983, members of Committee C16 requested that a task group be established to study the problem of burn hazard evaluation. The initial task group was established within the C16.24 Health and Safety subcommittee with the charter to establish "a guide for the determination of safe surface operating conditions for heated systems." The scope of this work included: (1) to establish a uniform definition of the human burn hazard; and (2) to establish a usable practice for design or evaluation, or both, of heated systems to prevent serious injury upon contact with exposed surfaces. After initial review of the scope and objectives, a second area was identified which was necessary to support the work of the first group. At the fall 1983 Committee C16 meeting, a task group within Subcommittee C16.30 on Thermal Measurements, was established with the objective to develop the analytical tools necessary for evaluating the contact burn potential of heated surfaces either on existing equipment or during design. These tools, when used with the guide established by the first group, are intended to provide to the user, designer, or manufacturer

the procedures needed to evaluate the relative safety of a piece of hardware or system.

X1.3.2 A survey was made of available literature to establish the state of the art on the subject and to determine what standards were already in place. The information in the background section of this Appendix summarizes some of the significant work done to date in this area. Significant technical papers which relate to burn hazard evaluation and associated medical research are listed in the References (1-16).

X1.3.3 In April 1984, each task group presented the first draft of the proposed standards. The two draft standards received final society approval in February 1986. The Guide C1055, developed by Subcommittee C16.24, establishes the definitions of burn hazards and a guide for evaluating the combinations of time of exposure, surface temperature, and surface composition that make up a system with potential hazards. Practice C1057, developed by Subcommittee C16.30 has identified two tools for the evaluation of specific systems for hazardous conditions. The first tool, intended for existing systems, is a device called the thermesthesiometer. Developed by Marzetta (13, 15, 16) at National Institute of Standards and Technology, this device simulates the thermophysical reaction of the human skin to touch contact with a heated surface. Although this device is relatively accurate and easy to use, it has the drawback of requiring an existing system for test and cannot be used during the design phase. The second tool identified combines the previously established Practice C680 method for surface temperature prediction with the modeling work of Dussan (12) to predict, for a given design, the expected contact temperature for the system. This temperature is a function of surface temperature and composition of both the jacketing material and insulation substrate. The designer then refers in Guide C1055 to determine the safety of the surface.

X1.4 Summary

X1.4.1 Personal injury resulting from contact with heated surfaces can be prevented by proper design of insulation systems or other protective measures. The work of Subcommittee C16.24 on Health and Safety and Subcommittee C16.30 on Thermal Measurements has established a guide for what constitutes *safe* surface conditions and has standardized the tools by which proposed or existing systems can be examined for potential burn hazard. These standards, supported by significant research into both the physical and medical processes involved, provide the designer the tools he needs to balance the expected exposure times, operating conditions, and system geometry to obtain the safest yet most economical systems.

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EXHIBIT C

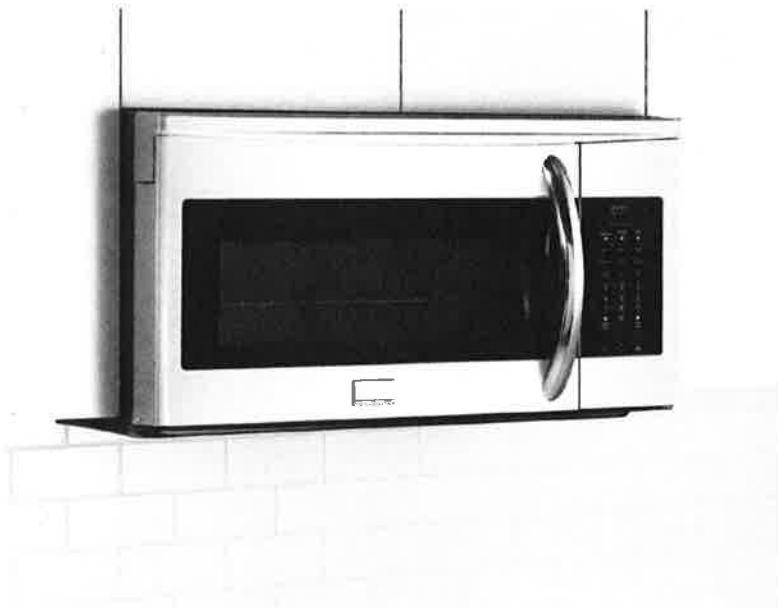
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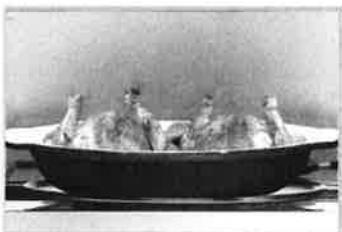
Microwave

FGMV154CL F

Featuring Convection



Signature Features



Convection Option

Bake and brown your favorite foods in your microwave oven with the touch of a button—ten preset options allow you to set the heat from 100 to 450 degrees.



Convection & Microwave Option

Combine the speed and freshness of microwave cooking with the browning capabilities of a convection oven, all with a simple one-touch button.



Effortless™ Reheat

Reheat almost anything with the touch of a button.



SpaceWise® Rack

Our SpaceWise® Rack creates more room so you can cook multiple dishes at once.

30" Over-The-Range

Product Dimensions

Height	16-13/32"
Width	29-7/8"
Depth	15-7/16"

More Easy-To-Use Features

Express-Select® Controls

Keep it fast and make it simple with Express-Select® Controls that conveniently set cooking temperature and time.

Smudge-Proof Stainless Steel

Protective coating reduces fingerprints and smudges so it's easy to clean.

Sensor Cooking

Microwave automatically adjusts power levels and cooking times to perfectly cook a variety of items, effortlessly.

One-Touch Options

Our microwaves feature easy-to-use one-touch buttons so you can bake a potato, pop popcorn or add 30 seconds to the timer with the touch of a button.

Two-Speed Ventilation

Freshen your kitchen and save space with our over-the-range microwaves that double as vent hoods.

Extra-Large 13-1/2" Diameter Glass Turntable

Big bowls and large casserole dishes are no problem for our extra-large glass turntable.

Convection Cooking Rack

Stainless Steel Interior

Available in:



Stainless
(F)

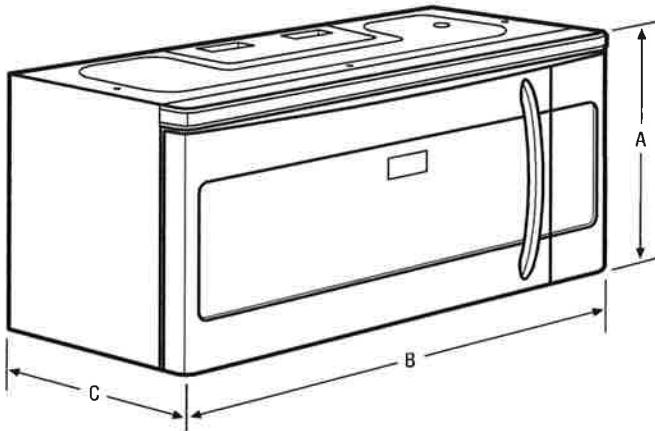


Microwave

FGMV154CL F 30" Over-The-Range

Features	
Control/Timing System	Express-Select®
Exterior Door Finish	Smudge-Proof Stainless Steel
Handle Design	Stainless Steel
Microwave Capacity (Cu.Ft.)	1.5
Convection Option	Yes (100° - 450°)
Convection & Microwave Option	Yes
Watts (IEC-705 Test Procedure)	900
Interior Light	Yes
Interior Color	Stainless Steel
Turntable Diameter	13-1/2"
Turntable On/Off	
Control Lock	Yes
Clock	Yes
Touch Pad Buttons	27
Power Levels	10
SpaceWise® Rack	Yes
Convection Cooking Rack	Yes
Microwave Control Options	
Popcorn Button	Yes
Chicken Nugget Button	Yes
Baked Potato Button	Yes
Sensor Reheat Options	3
Snack Button	Yes
Beverage	Yes
Melt & Soften Options	
Auto Reheat Options	3
Snack Menu Options	5
Auto Cook Options	Yes
Auto Defrost Options	Yes
Multi-Stage Cooking Option	
Keep Warm	
Add-30-Seconds	Yes
Sensor Cooking Options	4
Vegetable Cook Options	2
Delay Start	Yes
User Preferences	Yes
Ventilation System	
Ducted/Ductless Installation Option	Yes
Exhaust Fan (CFM)	2-Speed 170/300
Cooktop Light	Yes
Auto-Start Heat Sensor	Yes
Dishwasher-Safe Vent Filter (Ductless Installation)	Yes
Power Ratings	
Frequency (MHz)	2,450
Watts @ 120 Volts	1,640
Amps @ 120 Volts	15
Optional Accessories	
36" Stainless Steel Filler Panel Kit	PN # MWFILKTSS
Specifications	
Oven Interior (HxWxD)	8-15/16" x 20-1/4" x 13-15/16"
Power Supply Connection Location	Upper
Voltage Rating	120V/ 60Hz/15A
Connected Load (kW Rating) @ 120 Volts ¹	1.64
Minimum Circuit Required (Amps)	15
Shipping Weight (Approx.)	69 Lbs.

¹For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.



NOTE: For planning purposes only. Always consult local and national electric codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions		Cutout Dimensions	
A - Height	16-13/32"	Height (Min. from floor to top of unit)	66"
B - Width	29-7/8"	Width (Min.)	30"
C - Depth	15-7/16"	Depth (Min.)	12"
		Depth (Max.)	13"

Accessories information available on the web at frigidaire.com

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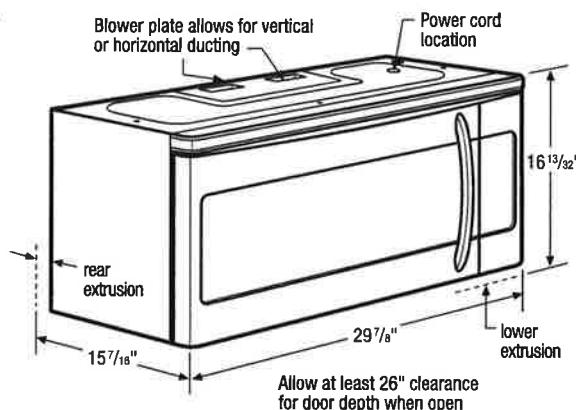
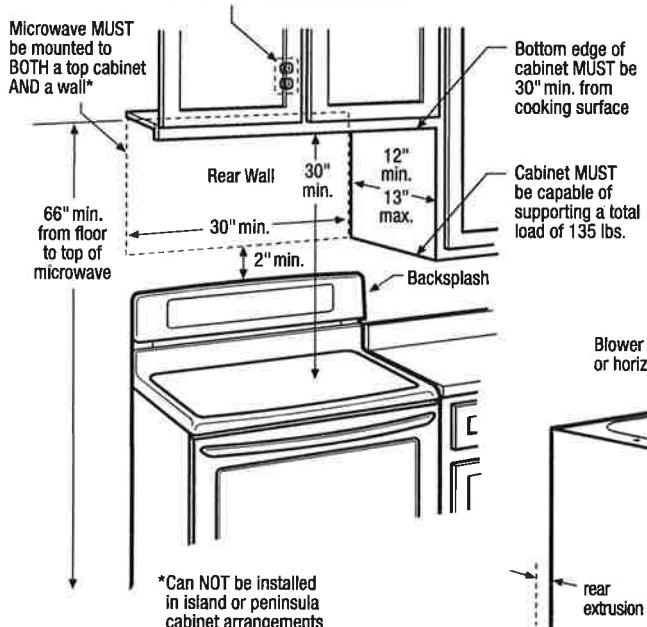
Specifications
subject to change.



Microwave

FGMV154CL F 30" Over-The-Range

Locate 120V/60Hz grounded outlet inside upper cabinet



Microwave Specifications

- Product Shipping Weight (approx.) - 69 Lbs.
- Voltage Rating - 120V / 60 Hz / 15 Amps
- Connected Load (kW Rating) @ 120 Volts = 1.64 kW
(For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.)
- Amps @ 120 Volts = 15 Amps
- Always consult local and national electric codes.
- Grounded outlet should be located in cabinet above, with hole in base to route power cord. Carefully follow top template instructions for power cord clearance when installing beneath smooth, flat cabinets.
- Microwave's exhaust ventilation system is preset to recirculate air inside with no ducting system required. Exhausting air outside is optional, using either vertical or horizontal ducting system. (Refer to Ducted Option Specifications for outside ventilation.)
- For safe and proper installation, microwave MUST be mounted to BOTH a top cabinet AND a wall, and connected to at least one wall stud. Can NOT be installed in island or peninsula cabinet arrangements.
- Cabinet bottom MUST be level to insure proper installation.
- Cabinet MUST be capable of supporting a total load of 135 lbs.
- Filler blocks recommended for installation when cabinet front hangs below recessed bottom shelf.
- Minimum distance of 30" required from cooking surface to bottom edge of top cabinet.
- Minimum distance of 66" required from floor to top of microwave.
- Opening between cabinets MUST be 30" wide and free of obstructions. For openings up to 36" wide, order optional 36" Filler Panel Kit to fill in gap between unit and cabinets.
- Allow 26" minimum clearance for 90° door swing.

Ducted Option Specifications

- For outside ventilation:
- Exhaust duct adapter will be needed for outside ventilation, to mate with standard 3-1/4" x 10" rectangular duct. If round duct required, rectangular-to-round transition adapter will be needed with no less than 6" diameter.
- For most efficient airflow exhaust, use a straight run or as few elbows as possible with a maximum duct length of 3-1/4" x 10" rectangular or 6" diameter round duct, not to exceed 120 equivalent feet.
- For horizontal installation, be sure to allow enough space between wall studs to accommodate exhaust.
- Refer to installation instructions on web for detailed duct preparation and converting exhaust vent blower system for exterior exhaust ventilation.

Note: For planning purposes only. Refer to Product Installation Guide on the web at frigidaire.com for detailed instructions.

Optional Accessories

- Stainless Steel Filler Panel Kit - (PN# MWFILKTSS)

Accessories information available
on the web at frigidaire.com



Specifications
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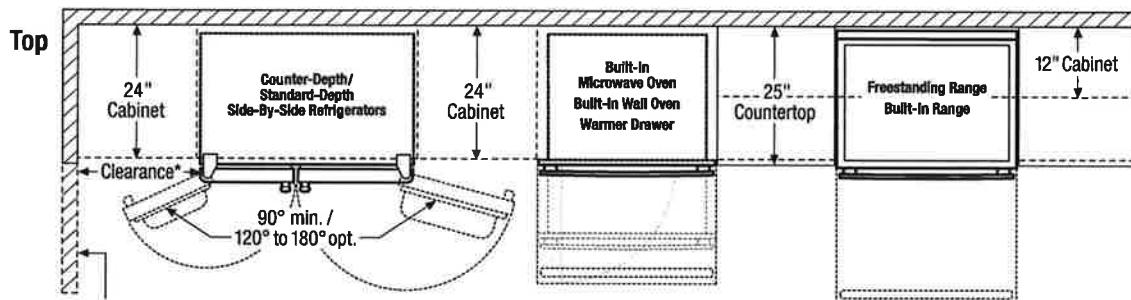
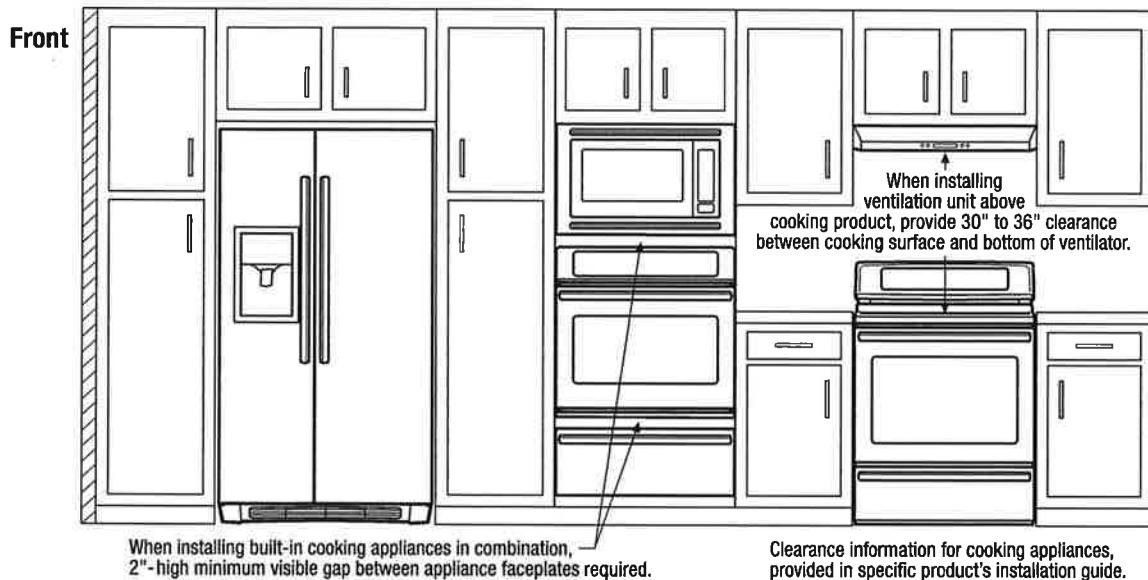
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General Installation Guidelines

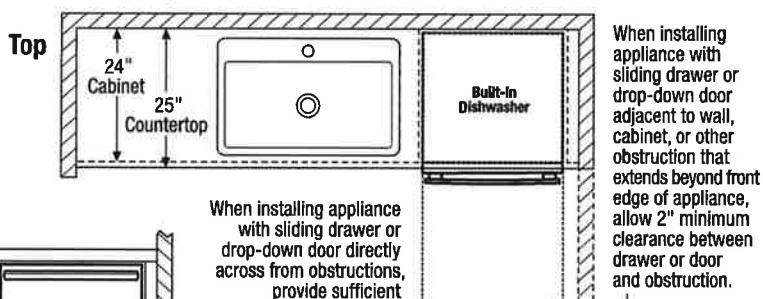
with Side-by-Side Refrigerator

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



*When installing side-by-side refrigerator adjacent to wall, cabinet or another appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 120° to 180° door swing, providing complete drawer/crisper access and removal. (Absolute 4-1/2" minimum clearance will ONLY allow for 90° door swing which will provide limited drawer/crisper access with restricted removal.)

When installing appliance with sliding drawer, swinging or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swings.



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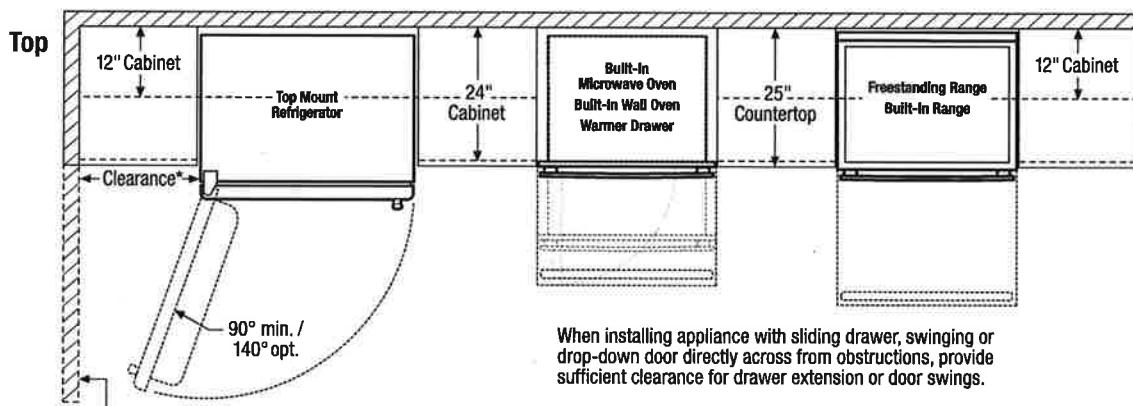
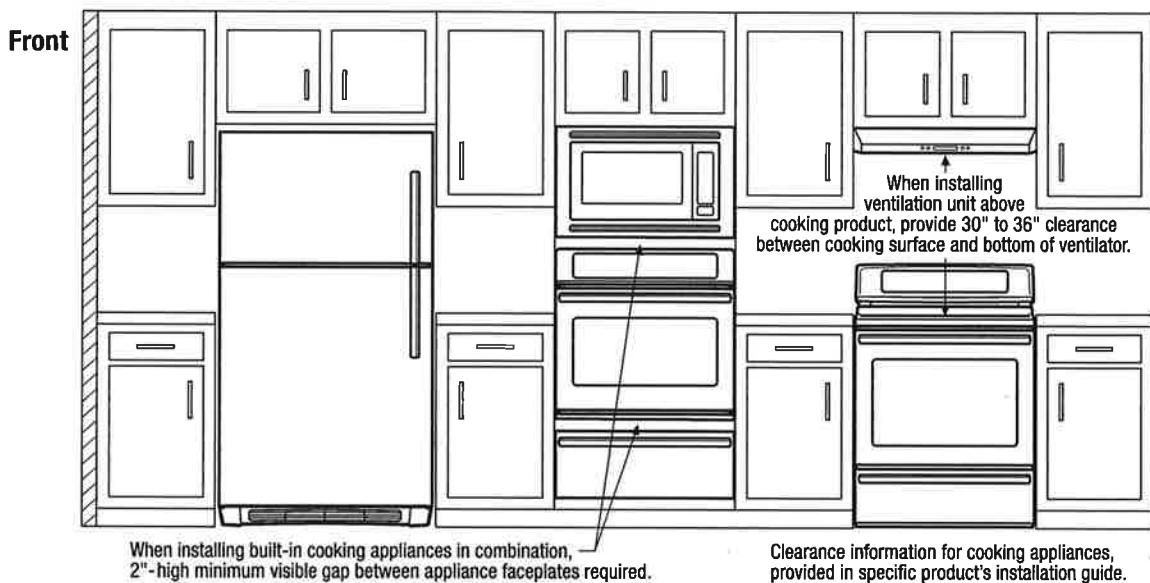
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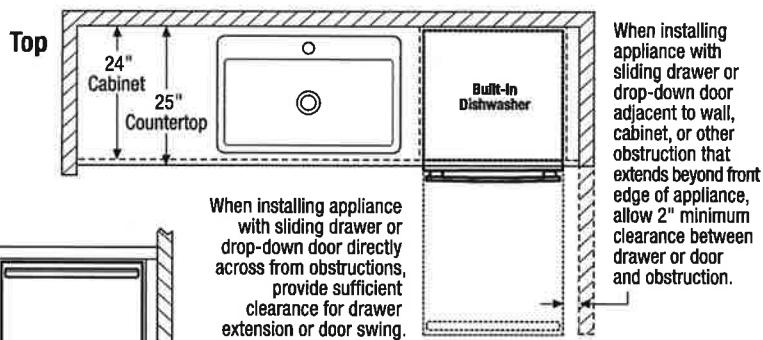
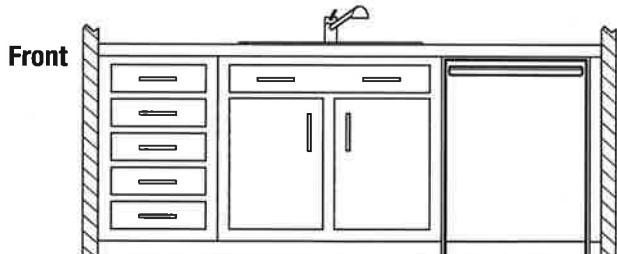
General Installation Guidelines

with Top Mount Refrigerator

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



*When installing top mount refrigerator adjacent to wall, cabinet or other appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 140° door swing, providing complete crisper access and removal. (Absolute 3" minimum clearance will ONLY allow for 90° door swing which will provide limited crisper access with restricted removal.)



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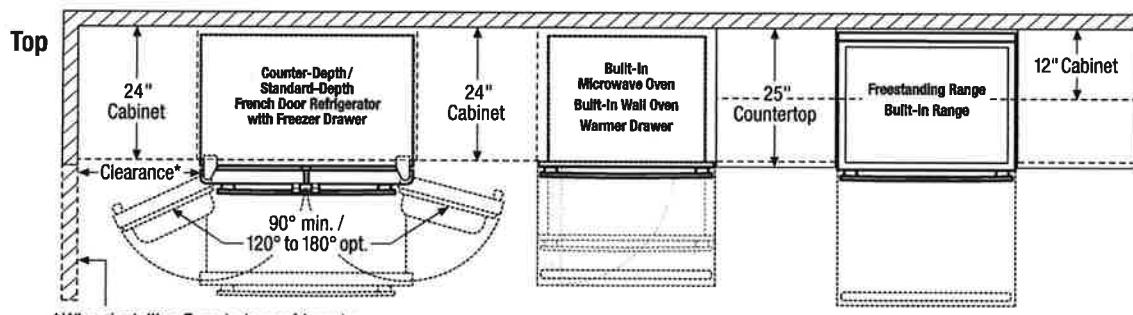
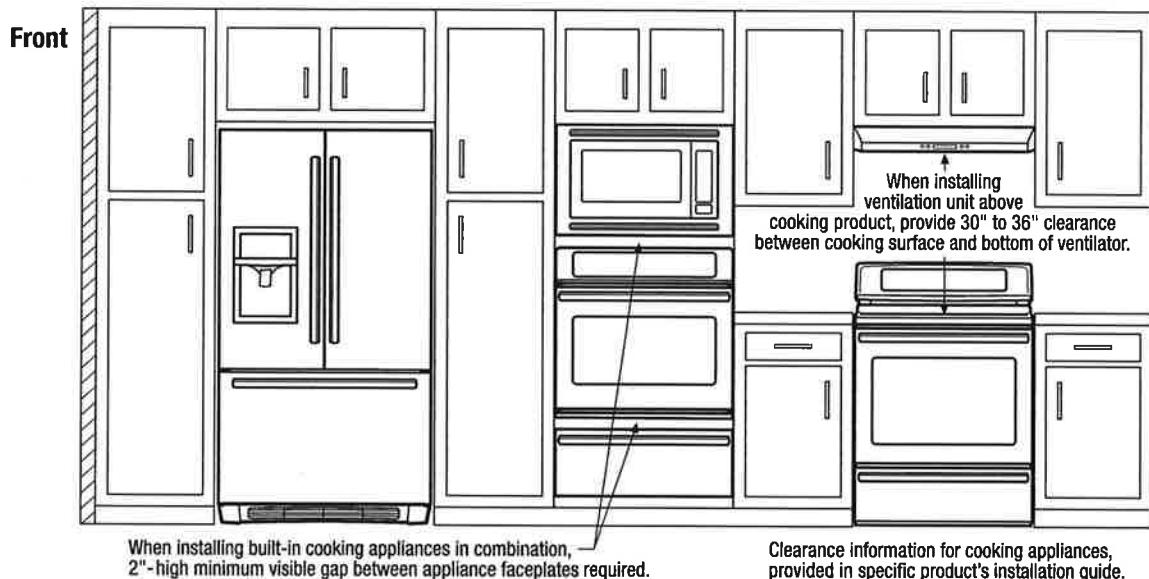
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General Installation Guidelines

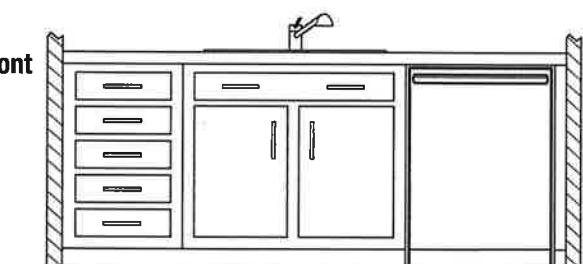
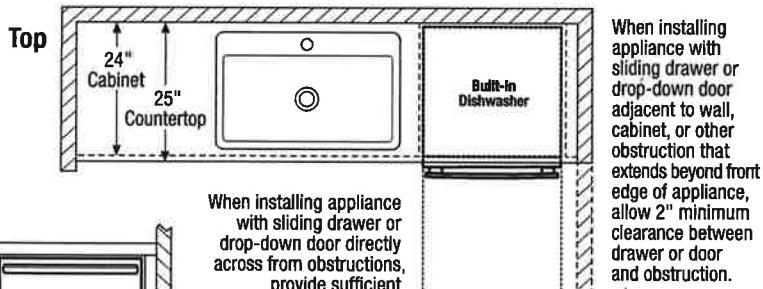
with French Door Refrigerator

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



*When installing French door refrigerator adjacent to wall, cabinet or another appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 120° to 180° door swing, providing complete drawer/crisper access and removal. (Absolute 4-1/2" minimum clearance will ONLY allow for 90° door swing which will provide limited drawer/crisper access with restricted removal.)

When installing appliance with sliding drawer, swinging or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swings.



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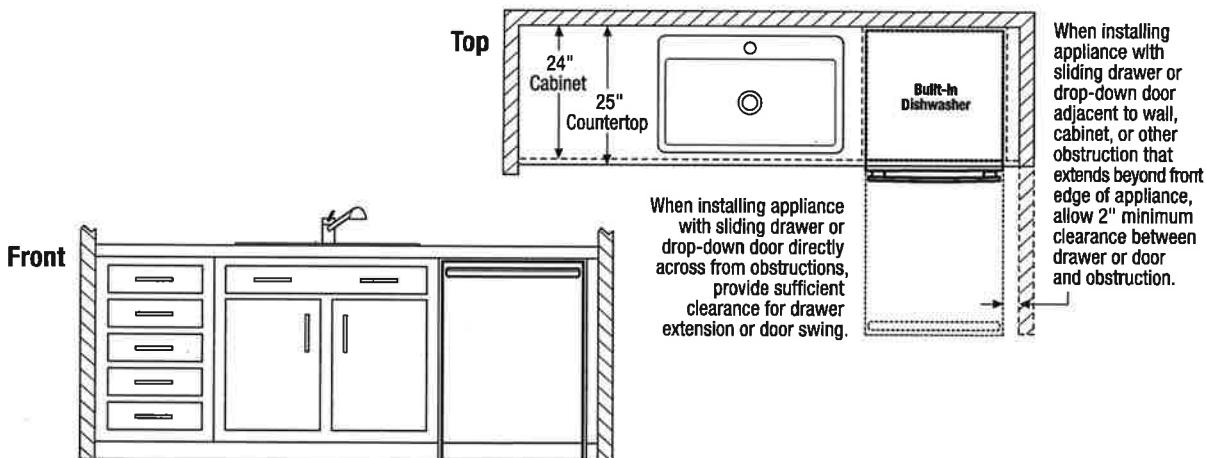
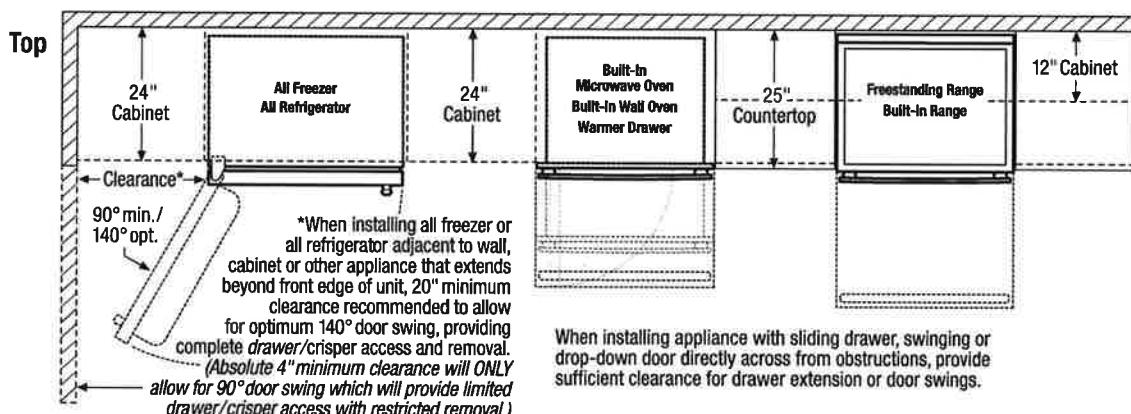
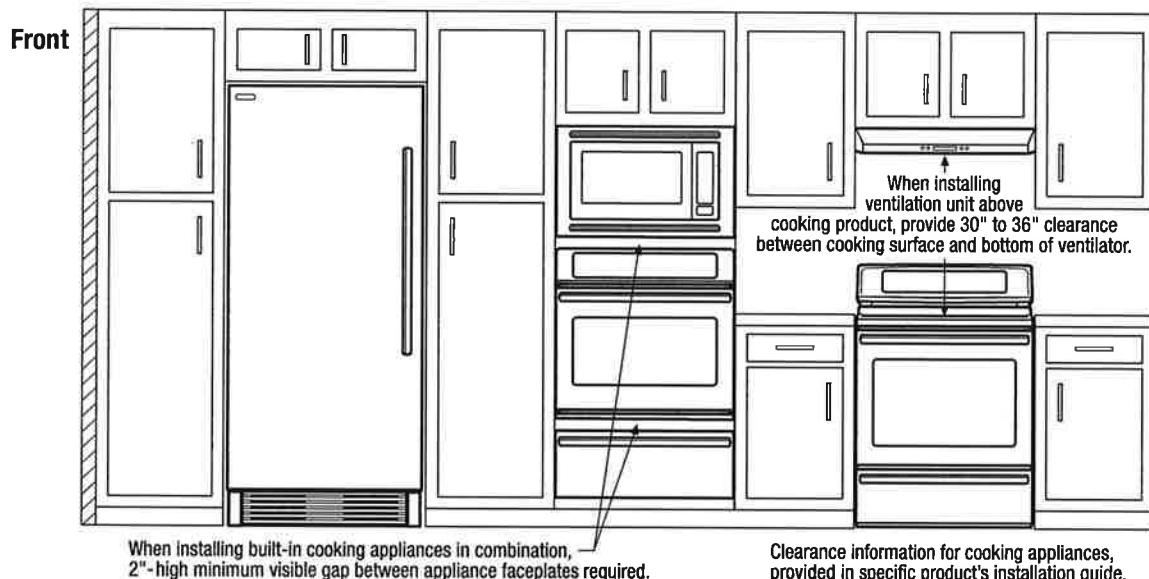
Specifications
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General Installation Guidelines

with All Refrigerator or All Freezer

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



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EXHIBIT D

FRIGIDAIRE

All about the

Use & Care

of your

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WELCOME & CONGRATULATIONS

Questions?

1-800-944-9044

(United States)

1-800-265-8352

(Canada)

Please attach sales receipt
here for future reference.

Congratulations on your purchase of a new microwave oven! At **Electrolux Home Products**, we are very proud of our product and are completely committed to providing you with the best service possible. Your satisfaction is our number one priority.

We know you'll enjoy your new microwave oven and **Thank You** for choosing our product. We hope you consider us for future purchases.

PLEASE CAREFULLY READ AND SAVE THESE INSTRUCTIONS

This Use & Care Manual provides specific operating instructions for your model. Use your microwave oven only as instructed in this manual. These instructions are not meant to cover every possible condition and situation that may occur. Common sense and caution must be practiced when installing, operating and maintaining any appliance.

Please record your model and serial numbers below for future reference.

Model Number: _____

Serial Number: _____

Purchase Date: _____

NEED HELP?

Visit the Frigidaire Web Site at: <http://www.frigidaire.com>

Before you call for service, there are a few things you can do to help us serve you better.

Read this manual.

It contains instructions to help you use and maintain your microwave oven properly.

If you received a damaged Microwave Oven... immediately contact the dealer (or builder) that sold you the Microwave Oven.

Save time and money.

Check the section titled "Service Call Check". This section helps you solve common problems that might occur. If you do need service, you can relax knowing help is only a phone call away. A list of toll-free customer service numbers is included in the back of this manual. Or call Frigidaire Customer Services at 1-800-944-9044, 24 hours a day, 7 days a week.

IMPORTANT SAFETY INSTRUCTIONS

For your safety the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or loss of life.

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Do not attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.
- (b) Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- (c) Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the: (1) door (bent), (2) hinges and latches (broken or loosened), (3) door seals and sealing surfaces.
- (d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

IMPORTANT SAFETY INSTRUCTIONS

Definitions

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

READ ALL INFORMATION BEFORE USING



WARNING

To reduce the risk of fire, burns, electric shock, injury to persons, or exposure to excessive microwave energy when using your appliance, follow basic **precautions, including the following sections.**

- Read all instructions before using the appliance.
- Read and follow the specific "**PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY**" on page 2.
- This appliance must be grounded. Connect only to properly grounded outlet. See "**GROUNDING INSTRUCTIONS**" on page 5.
- Install or locate this appliance only in accordance with the provided installation instructions.
- Some products such as whole eggs and sealed containers—for example, closed glass jars—are able to explode and should not be heated in this microwave oven.
- Use this appliance only for its intended use as described in this manual. Do not use corrosive chemicals or vapors in this appliance. This type of microwave oven is specifically designed to heat, cook or dry food. It is not designed for industrial or laboratory use.
- As with any appliance, close supervision is necessary when used by children.
- Do not operate this appliance if it has a damaged cord or plug, if it is not working properly or if it has been damaged or dropped.
- This appliance should be serviced only by qualified service personnel. Contact nearest Electrolux Authorized Servicer for examination, repair or adjustment.
- Do not cover or block any openings on the appliance.
- Do not store or use this appliance outdoors. Do not use this product near water—for example, near a kitchen sink, in a wet basement or near a swimming pool, or similar locations.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do not let cord hang over edge of table or counter.
- See door surface cleaning instructions on page 26.

- To reduce the risk of fire in the microwave oven cavity:

- **Do not overcook food. Carefully attend appliance when paper, plastic or other combustible materials are placed inside the microwave oven to facilitate cooking.**
- Remove wire twist-ties from paper or plastic bags before placing bag in microwave oven.
- **If materials inside the microwave oven ignite, keep microwave oven door closed, turn microwave oven off and disconnect the power cord or shut off power at the fuse or circuit breaker panel.**

- Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils or food in the cavity when not in use.

- Liquids, such as water, coffee or tea are able to be overheated beyond the boiling point without appearing to be boiling. Visible bubbling or boiling when the container is removed from the microwave oven is not always present. **THIS COULD RESULT IN VERY HOT LIQUIDS SUDDENLY BOILING OVER WHEN A SPOON OR OTHER UTENSIL IS INSERTED INTO THE LIQUID.**

To reduce the risk of injury to persons:

- Do not overheat the liquid.
- Stir the liquid both before and halfway through heating it.
- Do not use straight-sided containers with narrow necks. Use a wide-mouthed container.
- After heating, allow the container to stand in the microwave oven at least for 20 seconds before removing the container.
- Use extreme care when inserting a spoon or other utensil into the container.
- Clean ventilation openings and grease filters frequently. Grease should not be allowed to accumulate on ventilation openings, louver or grease filters.
- Use care when cleaning the louver and the grease filters. Corrosive cleaning agents, such as lye-based oven cleaners, may damage the louver and the grease filters.
- When flaming food under the hood, turn the fan on.
- This appliance is suitable for use above both gas and electric cooking equipment 36" wide or less.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

- When using the convection or combination cooking functions, both the outside and inside of the oven will become hot. Always use hot pads to remove containers of food and cooking accessories such as the oven shelf, round wire rack and glass tray.
- Do not clean with metal scouring pads. Pieces can burn off the pad and touch electrical parts involving risk of electric shock.
- Thermometer*— Do not use regular cooking or oven thermometers when cooking by microwave or combination. The metal and mercury in these thermometers could cause arcing and possible damage to the oven. Do not use a thermometer in food you are microwaving unless the thermometer is designed or recommended for use in the microwave oven.



WARNING

If you see arcing, press the **Stop/Clear** button and correct the problem.

ARCING

Arcing is the microwave term for sparks in the oven. Arcing is caused by:

- The metal shelf not installed correctly so it touches the microwave wall.
- Metal or foil touching the side of the oven.
- Foil not molded to food (upturned edges act like antennas).
- Metal, such as twist-ties, poultry pins, or gold-rimmed dishes, in the microwave.
- Recycled paper towels containing small metal pieces being used in the microwave.

Federal Communications Commission Radio Frequency Interference Statement (U.S.A. Only)

This equipment generates and uses ISM frequency energy and if not installed and used properly, that is in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with limits for ISM Equipment pursuant to part 18 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following:

- Reorient the receiving antenna of the radio or television.
- Relocate the microwave oven with respect to the receiver.
- Move the microwave oven away from the receiver.
- Plug the microwave oven into a different outlet so that the microwave oven and the receiver are on different branch circuits.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification to this microwave oven. It is the responsibility of the user to correct such interference.

Short Cord Instruction: a) A short power-supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord. b) Longer cord sets or extension cords are available and may be used if care is taken in their use. c) If a long cord or extension cord is used: 1) The marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the appliance; 2) The extension cord must be a grounding-type 3-wire cord; and 3) The longer cord should be arranged so that it will not drape over the counter top or tabletop where it can be pulled on by children or tripped over unintentionally.

VENTILATING HOODS: 1) Clean Ventilating Hoods Frequently – Grease should not be allowed to accumulate on hood or filter. 2) When flaming foods under the hood, turn the fan on.

Use care when cleaning the vent-hood filter. Corrosive cleaning agents, such as lye-based oven cleaners, may damage the filter.

Suitable for use above both gas and electric cooking equipment 36 inches or less wide.

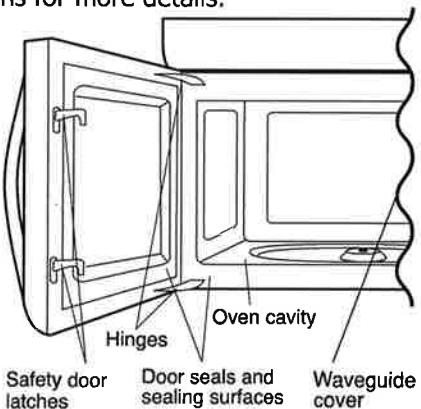
IMPORTANT SAFETY INSTRUCTIONS

UNPACKING AND EXAMINING YOUR MICROWAVE OVEN

Open the bottom of the carton, bend the carton flaps back and tilt the microwave oven over to rest on plastic foam pad. Lift carton off microwave oven and remove all packing materials, Installation Instructions, Wall Template, Top Template, Charcoal Filter, Turntable and Turntable Support. **SAVE THE CARTON AS IT MAY MAKE INSTALLATION EASIER.**

- Remove the feature sticker from the outside of the door, if there is one.
- **DO NOT REMOVE THE WAVEGUIDE COVER**, which is located on the right in the microwave oven cavity. Check to see that there are Installation Instructions, Wall Template, Top Template and Charcoal Filter, which is used when recirculating is chosen. Read enclosures and **SAVE THE Use and Care Manual.**

Check the microwave oven for any damage, such as misaligned or bent door, damaged door seals and sealing surfaces, broken or loose door hinges and latches and dents inside the cavity or on the door. If there is any damage, do not operate the microwave oven and contact your dealer or **ELECTROLUX SERVICER**. See Installation Instructions for more details.



GROUNDING INSTRUCTIONS

This appliance must be grounded. This microwave oven is equipped with a cord having a grounding wire with a grounding plug. It must be plugged into a wall receptacle that is properly installed and grounded in accordance with the National Electrical Code and local codes and ordinances. In the event of an electrical short circuit, grounding reduces risk of electric shock by providing an escape wire for the electric current.

WARNING

Improper use of the grounding plug can result in a risk of electric shock.

Electrical Requirements

Check Installation Instructions for proper location for the power supply.

The electrical requirements are a 120 volt 60 Hz, AC only, 13.5 amp. or more protected electrical supply. It is recommended that a separate circuit serving only the microwave oven be provided.

The microwave oven is equipped with a 3-prong grounding plug. It must be plugged into a wall receptacle that is properly installed and grounded. **DO NOT UNDER ANY CIRCUMSTANCES CUT OR REMOVE THE GROUNDING PIN FROM THE PLUG.** **DO NOT USE AN EXTENSION CORD.**

If the power supply cord is too short, have a qualified electrician or serviceman install an outlet near the appliance.

The Power Supply Cord and plug must be connected to a separate 120 Volt AC, 60 Hz, 13.5 Amp, or more branch circuit, single grounded receptacle. The receptacle should be located inside the cabinet directly above the Microwave Oven mounting location as shown in Figure 1.



NOTES

1. If you have any questions about the grounding or electrical instructions, consult a qualified electrician or service person.
2. Neither Electrolux nor the dealer can accept any liability for damage to the microwave oven or personal injury resulting from failure to observe the correct electrical connection procedures.

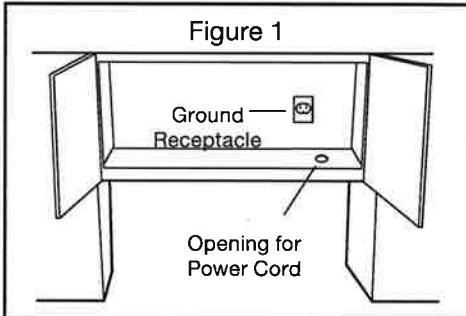
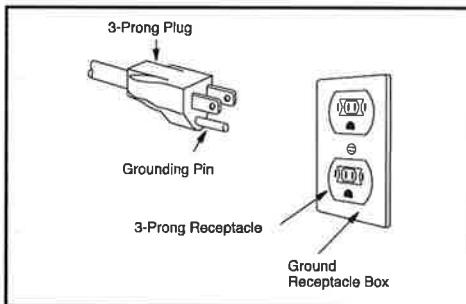


Figure 1

IMPORTANT SAFETY INSTRUCTIONS

ABOUT YOUR MICROWAVE OVEN

This Use and Care Manual is valuable: read it carefully and always save it for reference.

A good microwave cookbook is a valuable asset. Check it for microwave cooking principles, techniques, hints and recipes.

NEVER use the microwave oven without the turntable and support nor turn the turntable over so that a large dish could be placed in the microwave oven. The turntable will turn both clockwise and counterclockwise.

ALWAYS have food in the microwave oven when it is on to absorb the microwave energy.

When using the microwave oven at power levels below 100%, you may hear the magnetron cycling on and off. It is normal for the exterior of the microwave oven to be warm to the touch when cooking or reheating.

Condensation is a normal part of microwave cooking. Room humidity and the moisture in food will influence the amount of moisture that condenses in the microwave oven. Generally, covered foods will not cause as much condensation as uncovered ones. Ventilation openings must not be blocked.

The microwave oven is for food preparation only. It should not be used to dry clothes or newspapers.

Your microwave oven is rated 1000 watts by using the IEC Test Procedure. In using recipes or package directions, check food a minute or two before the minimum time and add time accordingly.

ABOUT FOOD

FOOD	DO	DON'T
Eggs, sausages, nuts, seeds, fruits & vegetables	<ul style="list-style-type: none"> Puncture egg yolks before cooking to prevent "explosion". Pierce skins of potatoes, apples, squash, hot dogs and sausages so that steam escapes. 	<ul style="list-style-type: none"> Cook eggs in shells. Reheat whole eggs. Dry nuts or seeds in shells.
Popcorn	<ul style="list-style-type: none"> Use specially bagged popcorn for microwave cooking. Listen while popping corn for the popping to slow to 1 or 2 seconds or use special popcorn pad. 	<ul style="list-style-type: none"> Pop popcorn in regular brown bags or glass bowls. Exceed maximum time on popcorn package.
Baby food	<ul style="list-style-type: none"> Transfer baby food to small dish and heat carefully, stirring often. Check temperature before serving. Put nipples on bottles after heating and shake thoroughly. "Wrist" test before feeding. 	<ul style="list-style-type: none"> Heat disposable bottles. Heat bottles with nipples on. Heat baby food in original jars.
General	<ul style="list-style-type: none"> Cut baked goods with filling after heating to release steam and avoid burns. Stir liquids briskly before and after heating to avoid "eruption". Use deep bowl, when cooking liquids or cereals, to prevent boilovers. 	<ul style="list-style-type: none"> Heat or cook in closed glass jars or air tight containers. Can in the microwave as harmful bacteria may not be destroyed. Deep fat fry. Dry wood, gourds, herbs or wet papers.

IMPORTANT SAFETY INSTRUCTIONS

ABOUT UTENSILS AND COVERINGS

It is not necessary to buy all new cookware. Many pieces already in your kitchen can be used successfully in your new microwave oven. Make sure the utensil does not touch the interior walls during cooking.

Use these utensils for safe microwave cooking and reheating:

- glass ceramic (Pyroceram®), such as Corningware®.
- heat-resistant glass (Pyrex®)
- microwave-safe plastics
- paper plates
- microwave-safe pottery, stoneware and porcelain
- browning dish (Do not exceed recommended preheating time. Follow manufacturer's directions.)

These items can be used for short time reheating of foods that have little fat or sugar in them:

- wood, straw, wicker

DO NOT USE

- metal pans and bakeware
- dishes with metallic trim
- non-heat-resistant glass
- non-microwave-safe plastics (margarine tubs)
- recycled paper products
- brown paper bags
- food storage bags
- metal twist-ties

Should you wish to check if a dish is safe for microwaving, place the empty dish in the microwave oven and microwave on HIGH for 30 seconds. A dish which becomes very hot should not be used.

The following coverings are ideal:

- Paper towels are good for covering foods for reheating and absorbing fat while cooking bacon.
- Wax paper can be used for cooking and reheating.
- Plastic wrap that is specially marked for microwave use can be used for cooking and reheating. DO NOT allow plastic wrap to touch food. Vent so steam can escape.
- Lids that are microwave-safe are a good choice because heat is kept near the food to hasten cooking.
- Microwave oven cooking bags are good for large meats or foods that need tenderizing. DO NOT use metal twist ties. Remember to slit bag so steam can escape.

How to use aluminum foil in your microwave oven:

- Small flat pieces of aluminum foil placed smoothly on the food can be used to shield areas that are either defrosting or cooking too quickly.
- Foil should not come closer than one inch to any surface of the microwave oven.

Should you have questions about utensils or coverings, check a good microwave cookbook or follow recipe suggestions.

ACCESSORIES There are many microwave accessories available for purchase. Evaluate carefully before you purchase so that they meet your needs. A microwave-safe thermometer will assist you in determining correct doneness and assure you that foods have been cooked to safe temperatures. Electrolux is not responsible for any damage to the microwave oven when accessories are used.

ABOUT CHILDREN AND THE MICROWAVE

Children below the age of 7 should use the microwave oven with a supervising person very near to them. Between the ages of 7 and 12, the supervising person should be in the same room.

As with any appliance, close supervision by an adult is necessary when used by children.

At no time should anyone be allowed to lean or swing on the microwave oven door.

Children should be taught all safety precautions: use potholders, remove coverings carefully, pay special attention to packages that crisp food because they may be extra hot.

Don't assume that because a child has mastered one cooking skill he/she can cook everything.

Children need to learn that the microwave oven is not a toy. See page 23 for Child Lock feature.

ABOUT SAFETY

- Check foods to see that they are cooked to the United States Department of Agriculture's recommended temperatures.

TEMP	FOOD
145°F (63°C)	- For beef, lamb or veal cut into steaks, chops or roasts, fish
160°F (71°C)	- For fresh pork, ground meat, seafood, egg dishes, frozen prepared food and beef, lamb or veal cut into steaks, chops or roasts
165°F (74°C)	- For leftover, ready-to-reheat refrigerated, deli and carry out "fresh" food, whole chicken or turkey, chicken or turkey breasts and ground poultry used in chicken or turkey burgers



NOTE

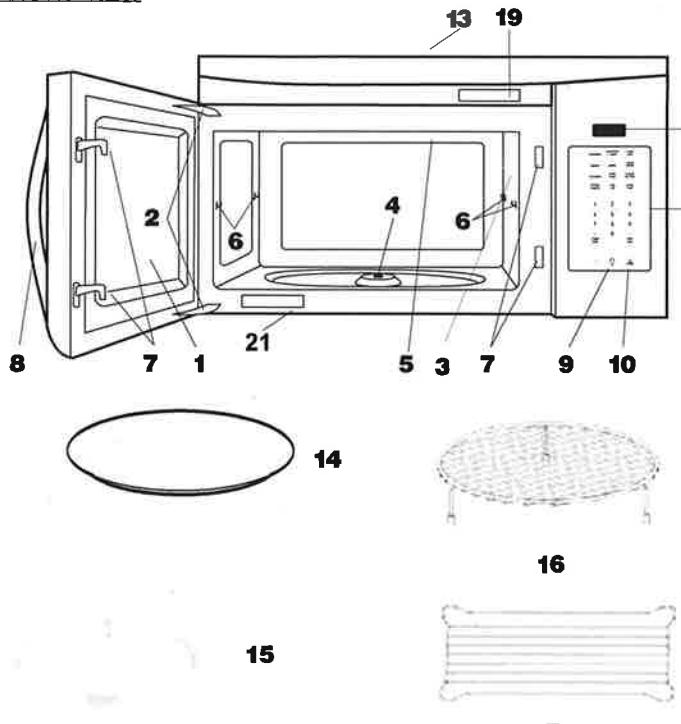
Do not cook whole, stuffed poultry. Cook stuffing separately to 165°F.

To test for doneness, insert a meat thermometer in a thick or dense area away from fat or bone. NEVER leave the thermometer in the food during cooking, unless it is approved for microwave oven use.

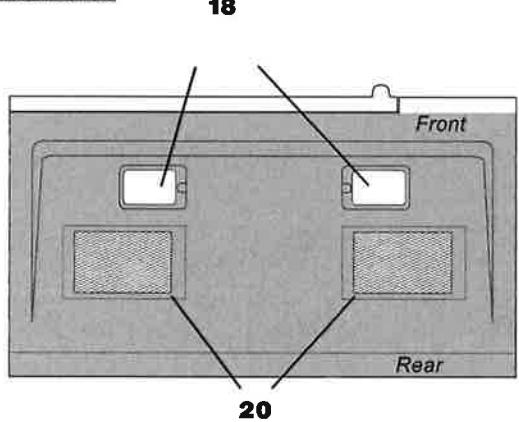
- ALWAYS use potholders to prevent burns when handling utensils that are in contact with hot food. Enough heat from the food can transfer through utensils to cause skin burns.
- Avoid steam burns by directing steam away from the face and hands. Slowly lift the farthest edge of a dish's covering and carefully open popcorn and oven cooking bags away from the face.
- Stay near the microwave oven while it's in use and check cooking progress frequently so that there is no chance of overcooking food.
- NEVER use the cavity for storing cookbooks or other items.
- Select, store and handle food carefully to preserve its high quality and minimize the spread of foodborne bacteria.
- Keep waveguide cover clean. Food residue can cause arcing and/or fires.
- Use care when removing items from the microwave oven so that the utensil, your clothes or accessories do not touch the safety door latches.
- Keep aluminum foil used for shielding at least 1 inch away from walls, ceiling and door.

PART NAMES

FRONT VIEW



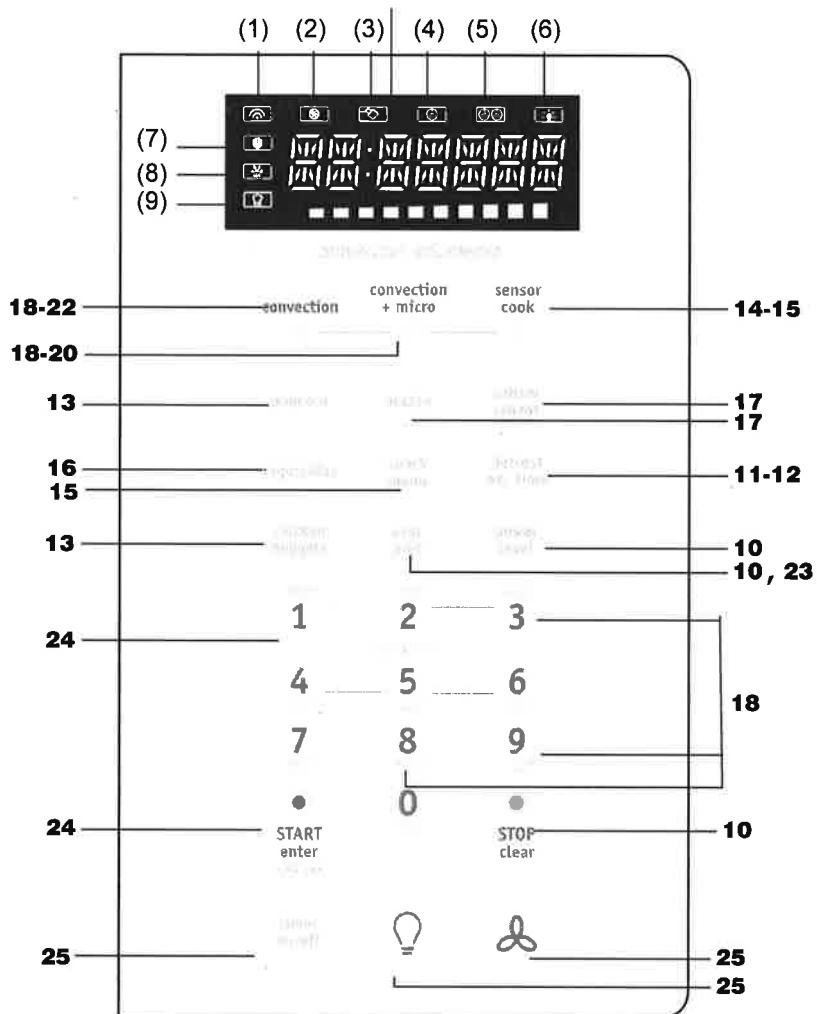
BOTTOM VIEW



- 1 Microwave oven door with see-through window
- 2 Door hinges
- 3 Waveguide cover:
DO NOT REMOVE.
- 4 Turntable motor shaft
- 5 Microwave oven light
It will light when microwave oven is operating or door is open.
- 6 Rack holders
- 7 Safety door latches
The microwave oven will not operate unless the door is securely closed.
- 8 Handle
- 9 Light on/off pad 
Press the **light on/off** pad once for on, twice for off.
- 10 Vent hi/lo/off pad 
Press the **vent hi/lo/off** pad once for high speed, twice for low speed and three times to turn off the fan.
- 11 Auto-Touch control panel
- 12 Time display: Digital display, 99 minutes, 99 seconds
- 13 Ventilation openings
- 14 Removable turntable
The turntable will rotate clockwise or counter-clockwise. Only remove for cleaning.
- 15 Removable turntable support
First, carefully place the turntable support in the motor shaft in the center of the microwave oven floor. Then, place the turntable on the turntable support securely.
- 16 Round wire rack (use in convection and combination cooking on the removable turntable)
- 17 Shelf (use in microwave cooking)
- 18 Light cover
- 19 Menu label
- 20 Grease filters
- 21 Rating label

CONTROL PANEL

The 7-digit Interactive Display spells out operating steps and shows cooking hints.



Number next to the control panel illustration indicates pages on which there are feature descriptions and usage information.

- (1) **Microwave Symbol**
- (2) **Convection Symbol**
- (3) **Child Lock Symbol**
- (4) **Low-speed Vent Symbol**
- (5) **High-speed Vent Symbol**
- (6) **Lamp**
- (7) **Timer Symbol**
- (8) **Defrost Symbol**
- (9) **Auto Cook Symbol**

NOTE

When a pad is pressed, an audible signal will be heard which confirms the pad has been pressed.

BEFORE OPERATING

- Before operating your new oven make sure you read and understand this Use and Care Guide completely.
- Before the Over the Range Microwave Oven can be used, follow these procedures:
 1. Plug in the oven. Close the door. The oven display will show **ENJOY YOUR OVEN PRESS CLEAR**.
 2. Press the **STOP clear** pad. **[:] will appear.**
 3. Set clock. See below.

To Set the Clock

- Suppose you want to enter the correct time of day 12:30 (A.M or P.M.).

Step	Press
1. Press the user pref pad.	user pref
2. Press number 1.	1
3. Enter the correct time of day by pressing the numbers in sequence.	1 2 3 0
4. Press the START enter +30 sec pad.	START enter +30 sec

This is a 12 hour clock. If you attempt to enter an incorrect clock time, **ERROR** will appear in the display. Press the **STOP clear** pad and re-set the clock.



NOTE

Your Over the Range Microwave Oven can be programmed with the door open except for **+30 sec**

STOP clear

Press the **STOP clear** to:

1. Erase if you make a mistake during programming.
2. Cancel timer and the signal after cooking.
3. Stop the oven temporarily during cooking.
4. Return the time of day to the display.
5. Cancel a program during cooking, press twice.

MANUAL COOKING

Time Cooking

Your Over the Range Microwave Oven can be programmed for 99 minutes 99 seconds (99:99). Always enter the seconds after the minutes, even if they are both zeros.

- Suppose you want to cook for 5 minutes at 100%.

Step	Press
1. Enter cooking time. (The first number should be entered in 2 seconds.)	5 0 0
2. Press the START enter +30 sec pad	START enter +30 sec

To Set Power Level

There are ten preset power levels.

Using lower power levels increases the cooking time which is recommended for foods such as cheese, milk and long slow cooking of meats. Consult cookbook or recipes for specific recommendations.

PRESS POWER LEVEL PAD NUMBER OF TIMES FOR DESIRED POWER	APPROXIMATE PERCENTAGE OF POWER	COMMON WORDS FOR POWER LEVELS
POWER LEVEL x 1	100%	High
POWER LEVEL x 2	90%	
POWER LEVEL x 3	80%	
POWER LEVEL x 4	70%	Medium High
POWER LEVEL x 5	60%	
POWER LEVEL x 6	50%	Medium
POWER LEVEL x 7	40%	
POWER LEVEL x 8	30%	Med Low/Defrost
POWER LEVEL x 9	20%	
POWER LEVEL x 10	10%	Low

MANUAL COOKING

Using the Round Wire Rack

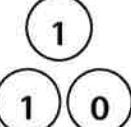
The rack allows several foods to be cooked or reheated by convection. Cook with SENSOR COOKING or AUTO COOKING without the rack. But Chicken Nuggets is one of AUTO COOKING, can use the rack, glassware or ceramic cookware, Do not use metal cookware. Allow plenty of space around and between the dishes. Pay close attention to the cooking and reheating progress. Reposition the foods and reverse them from the rack to turntable and/or stir them at least once during any cooking or reheating time. After cooking or reheating, stir if possible. Using a lower power level will assist in better cooking and reheating uniformity.

Avoid:

- Storing the rack in the microwave oven when not in use.
- Popping popcorn with the rack in the microwave oven.
- Using any browning dish on the rack.
- Using SENSOR COOKING and AUTO COOKING with the rack.
- Cooking directly on the rack—use microwave-safe cookware.

Setting Defrost by Weight

- Suppose you want to defrost 1lb. of food with the default power level and cook time determined automatically:

Step	Press
1. Press Defrost Wt/time pad once. The defrost icon  will light in the display.	defrost wt/time
2. Press number 1.	
3. Use the numeric pads to input weight of food to defrost in pounds (10 = 1lb.) You may enter any weight from 0.1 to 6.0lbs.	
4. Press START/enter/+30sec. pad.	START enter +30 sec

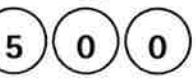
When the defrost time is complete, cooking completion signal will beep and END will appear in the display.

NOTE

The weight amount must be a valid entry for this feature to start. A valid weight entry is 0.1 to 6.0 pounds.

Setting Defrost by Time

- Suppose you want to defrost food with the default 30% power level for 5 minutes:

Step	Press
1. Press Defrost Wt/time pad once. The defrost icon  will light in the display.	defrost wt/time
2. Press number 2.	
3. Use the number pads to enter desired defrost time (defrost time may be set up to 99 minutes and 99 seconds).	
4. Press START/enter/+30sec. pad.	START enter +30 sec

When the defrost time is complete, cooking completion signal will beep and END will appear in the display.

NOTE

Power levels cannot be changed for both defrost (by weight or defrost (by time) because the defrost performance will be adversely affected.

Special notes for defrosting by time

- After pressing **START** key, the display will count down remaining defrost time. The oven will beep twice during the defrost cycle. At this time open the door and turn the food if needed and remove any portions that have already thawed. Touch the **START** key to resume the defrost cycle.
- When heating has finished you will hear beeps.

NOTE

MANUAL COOKING

Defrosting tips

- When using the **defrost by weight** feature, the weight entered should always be pounds (valid entries are from 0.1 to 6.0 pounds).
- Use both **defrost weight** and **defrost time** features for raw food items only. Defrosting gives best results when food to be thawed is a minimum of 0°F (taken directly from a true freezer). If the food has been stored in a refrigerator-freezer that does not maintain a temperature of 5° F or below, always program a lower food weight or lower cook time to prevent cooking the food.
- If the frozen food is stored outside the freezer for up to 20 minutes, enter a reduced cook time or weight.
- The shape of the package will alter the defrosting time. Shallow rectangular food packets defrost more quickly than a deep frozen block of food.
- Separate pieces as they begin to defrost. Separated frozen pieces of food defrost better.
- Shield warm areas of food with small pieces of foil if they start to become warm.
- You may use small pieces of aluminum foil to shield food items like chicken wings, leg tips and fish tails, but do not allow the foil to touch the oven cavity walls when defrosting.

Defrosting suggestions

For best results, please read these suggestions when defrosting .

FOOD	AMOUNT	PROCEDURE
1. Ground Meat	0.5 - 3.0 lb 0.3 - 1.3 kg	Turn over and remove any thawed pieces after each stage. Let stand, covered, for 5 to 10 minutes.
2. Steaks/Chops/ Fish	0.5 - 4.0 lb 0.3 - 1.8 kg	After each stage, rearrange and if there are warm or thawed portions, shield with small flat pieces of aluminum foil. Remove any meat or fish that is almost defrosted. Let stand, covered, for 10 to 20 minutes.
3. Chicken Pieces	0.5 - 3.0 lb 0.3 - 1.3 kg	After each stage, rearrange pieces or remove portions should they become warm or thawed. Let stand, covered, for 10 to 20 minutes.
4. Roast	2.0 - 4.0 lb 1.0 - 1.8 kg	Start defrosting with fat side down. After each stage, turn roast over and shield the warm portions with aluminum foil. Let stand, covered, for 30 to 60 minutes.
5. Casserole	2 - 6 cups	After audible signal, stir if possible. At end, stir well and let stand, covered, for 5 to 10 minutes.
6. Soup	1 - 6 cups	After audible signal, stir if possible. At end, stir well and let stand, covered, for 5 to 10 minutes.

AUTO COOKING

Popcorn

⚠ CAUTION

DO NOT leave microwave oven unattended while popping corn.

The popcorn feature lets you pop 3 different commercially packaged microwave popcorn sized bags. Use the table below to determine the setting to use.

Amount	Press popcorn pad
3.50 oz. (default setting)	once
3.00 oz.	2 times
1.75 oz.	3 times

- Suppose you want to pop a 3.0 oz. bag of popcorn automatically.

Step	Press
------	-------

1. Press **Popcorn** pad (1, 2 or 3 times - refer to table above to change for bag size). **popcorn**

2. Press **START enter +30 sec** pad. **START enter +30 sec**

Chicken Nuggets

- Suppose you want to heat 4 Oz- 24 Oz chicken nuggets.

Step	Press
1. Press the chicken nuggets pad.	chicken nuggets
2. Enter amount by pressing the number 4. Ex: 4.0 Oz chicken nuggets.	4
3. Press the START enter +30 sec pad.	START enter +30 sec

NOTES

- When 5.0 pound chicken nuggets is heated, press number 5 at Step 2.
- Chicken nuggets use the round wire rack, glassware or ceramic cookware, Do not use metal cookware.

Chicken Nuggets chart

FOOD	AMOUNT	PROCEDURE
Chicken Nuggets	4 Oz- 24 Oz	Place frozen chicken nuggets on a flat plate allowing space between each. It is not necessary to cover them. When oven stops, rearrange and press the START enter +30 sec pad.

SENSOR COOKING

Sensor cooking has an electronic controlled sensor that detects the vapor (moisture and humidity) emitted from the food as it heats. The sensor adjusts the cooking times and power level for various foods and quantities automatically.

Menu label

sensor cook	sensor reheat	snacks
1 Frozen Entrees	1 Pasta	1 Frozen MW Pizza
2 Frozen Pizza	2 Soup	2 Hot Dogs
3 Ground Meat	3 Dinner Plate	3 Frozen Kids Meals
4 Rice		4 Meal in a cup
		5 Soup
		6 Beverage

Using Sensor Settings:

1. After oven is plugged in, wait 2 minutes before using Sensor Settings.
2. Be sure the exterior of the cooking container and the interior of the oven are dry. Wipe off any moisture with a dry cloth or paper towel.
3. More or less food than the quantity listed in the chart should be cooked following the guidelines in any microwave cookbook.
4. During the first part of SENSOR COOKING, food name will appear in the display. Do not open the oven door or press the **STOP clear** pad during this part of the cycle. The measurement of vapor will be interrupted. If this occurs, an error message will appear. To continue cooking, press the **STOP clear** pad and cook manually.

When the sensor detects the vapor emitted from the food, remainder of cooking time will appear. Door may be opened when remaining cooking time appears in the display. At this time, you may stir or season food, as desired.

5. If the sensor does not detect vapor properly when cooking rice, the oven will turn off, and the correct time of day will be displayed. If the sensor does not detect vapor properly when cooking other foods, **ERROR** will be displayed, and the oven will turn off.
6. Check food for temperature after cooking. If additional time is needed, continue to cook manually.

Covering Foods:

Some foods cook better when covered. Use the cover recommended in the food charts.

1. Casserole lid.
2. Plastic wrap: Use plastic wrap recommended for microwave cooking. Cover dish loosely; allow approximately 1/2 inch to remain uncovered to allow steam to escape. Plastic wrap should not touch food.
3. Wax paper: Cover dish completely; fold excess wrap under dish to secure. If dish is wider than paper, overlap two pieces at least one inch to cover.

Be careful when removing any covering to allow steam to escape away from you.

SENSOR COOKING applies to the following selections: Sensor Cook, Snack Menu, Vegetables, Potato, Sensor Reheat.

NOTES for SENSOR COOKING

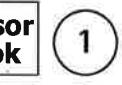
1. The final cooking result will vary according to the food condition (e.g. initial temperature, shape, quality). Check food for temperature after cooking. If additional time is needed, continue to cook manually.
2. When sensor detects the vapor emitted from the foods, manipulation message or remaining cooking time will be displayed.
3. Stay near the oven while it's in use and check cooking progress frequently so that there is no chance of overcooking food.
4. It is not necessary to enter amount.

Sensor Cook

There are 4 foods (Frozen Entrees, Frozen Pizza, Ground Meat and Rice) under the SENSOR COOK.

You can cook many foods by pressing the **sensor cook** pad and the food number. You don't need to calculate cooking time or power level.

- Suppose you want to cook Frozen Entrees.

Step	Press
1. Press the sensor cook pad, number 1 for Frozen Entrees.	sensor cook  1
2. At end, follow the directions in the display.	
3. Press the START enter +30 sec pad.	START enter  +30 sec

NOTES for SENSOR COOKING

- Check the *Cookware Tips* section for correct cookware when *Combination Cooking*
- Do not use metal cookware when *Combination Cooking*
- For best roasting and browning results, whole roasts should be cooked in a glass dish placed directly on the oven shelf.
- For foods that are too tall to fit in the oven, you can leave out the trivet. If necessary, you may take out the shelf and place the dish directly on the turntable.

SENSOR COOKING

Sensor Cook chart

FOOD	AMOUNT	PROCEDURE
(Initial temperature)		
1. Frozen Entrees (-18 °C)	8 - 24 oz 225 - 680 g	Use this pad for frozen, convenience foods. It will give satisfactory results for most brands. You may wish to try several and choose your favorite. Remove package from outer wrapping and follow package directions for covering. After cooking, let stand, covered for 1 to 3 minutes.
2. Frozen Pizza (-18 °C)	6 - 12 oz 170 - 340 g	Use for frozen microwave pizza. Remove from package and unwrap. Follow package directions for use of package and/or silver crisping disk.
3. Ground Meat (5 °C)	8 - 24 oz 225 - 680 g	Use this setting to cook ground beef or turkey as patties or in a casserole to be added to other ingredients. Place patties on a microwave-safe shelf and cover with wax paper. Place ground meat in a casserole and cover with wax paper or plastic wrap. When oven stops, turn patties over or stir meat in casserole to break up large pieces. Re-cover and press the START enter +30 sec pad. After cooking, let stand, covered, for 2 to 3 minutes.
4. Rice (Room temperature)	1 - 2 cups	Place rice into a deep casserole dish and add double quantity of water. Cover with lid or plastic wrap. After cooking, stir, cover and let stand 3 to 5 minutes or until all liquid has been absorbed.

Snack Menu

Snack Menu is for cooking/heating foods that take a short amount of time!

There are 6 foods (Frozen MW Pizza, Hot Dogs, Frozen Kid's Meal, Meal in a Cup, Soup, Beverage) under the SNACK MENU.

- Suppose you want to reheat a slice of frozen pizza with snack.
- | Step | Press |
|--|----------------------------|
| 1. Press the snack menu pad and number 1 for pizza. | snack menu 1 |
| 2. Press the START enter +30 sec pad. | START enter +30 sec |

Snack Menu chart

FOOD	AMOUNT	PROCEDURE
(Initial temperature)		
1. Frozen MW Pizza(-18 °C)	6 - 12 oz 170 - 340 g	Use for frozen microwave pizza. Remove from package and unwrap. Follow package directions for use of package and/or silver crisping disk.
2. Hot Dogs(5 °C)	8 - 24 oz	Place hot dog in bun. Wrap each with paper towel or napkin.
3. Frozen Kid's Meal (-18 °C)	6 - 8 oz 170 - 225 g	Use this pad for frozen, convenience foods. It will give satisfactory results for most brands. You may wish to try several and choose your favorite. Remove package from outer wrapping and follow package directions for covering. After cooking, let stand, covered for 1 to 3 minutes.
4. Meal in a Cup (5 °C)	1 cup	This setting is ideal for individual portions of canned food packed in a small microwaveable container, usually 6 to 8 ounces. Remove inner metal lid and replace outer microwaveable lid. After cooking, stir food and allow to stand 1 or 2 minutes.
5. Soup (5 °C)	1 - 4 cups (8 -32 oz)	Place in bowl or casserole. Cover with lid or plastic wrap. At end, stir, re-cover and let stand 1 to 3 minutes.
6. Beverage (5 °C)	1 - 2 cups	This setting is good for restoring a cool beverage to a better drinking temperature. Stir liquid briskly before and after heating to avoid "eruption".

SENSOR COOKING

Vegetables

There are 2 options (Frozen Vegetables, Fresh Vegetables) under the VEGETABLES.

- Suppose you want to cook fresh Vegetables .

Step	Press
1. Press the vegetables pad and number 2 for fresh Vegetables .	 2
2. Press the START enter +30 sec pad.	

Vegetables chart

FOOD (Initial temperature)	AMOUNT	PROCEDURE
1. Frozen Vegetables (-18 °C)	4 - 24 oz 0.2 - 0.7 kg	Add no water. Cover with lid or plastic wrap. Press the vegetables pad and number 1 for fresh Vegetables . After cooking, stir and let stand, covered, for 3 minutes.
2. Fresh Vegetables (5 °C) Broccoli Brussels sprouts Cabbage Cauliflower (flowerets) Cauliflower (whole) Spinach Zucchini Baked apples Carrots, sliced Corn on cob Green beans Winter squash - diced - halves	4 - 24 oz 0.2 - 0.7 kg	Wash and place in casserole. Add no water if vegetables have just been washed. Cover with lid for tender vegetables. Use plastic wrap for tender-crisp vegetables. Press the vegetables pad and number 1 for fresh Vegetables . After cooking, stir, if possible. Let stand, covered, for 2 to 5 minutes. Place in casserole. Add 1-4 tbsp. water. Cover with lid for tender vegetables. Use plastic wrap cover for tender-crisp vegetables. Press the vegetables pad and number 1 for fresh Vegetables . After cooking stir, if possible. Let stand, covered, for 2 to 5 minutes.

SENSOR COOKING

Potato

There is 1 option (potato) under the POTATO.

- Suppose you want to cook 2 potatoes.

Step	Press
1. Press the potato pad.	potato
2. Press START/enter/+30sec. pad.	START enter +30 sec

Potato chart

FOOD	AMOUNT	PROCEDURE
Potato (Room temperature)	1 - 4 pieces (230g/pc)	Pierce with fork in several places. Place on paper towel on turntable. After cooking, remove from oven and let stand wrapped in foil for 5 to 10 minutes.

Sensor Reheat

There is 3 options (Pasta,Soup,Dinner Plate) under the SENSOR REHEAT.

- Suppose you want to reheat soup.

Step	Press
1. Press the sensor reheat pad. and number 2 for soup.	sensor reheat 2
2. Press START/enter/+30sec. pad.	START enter +30 sec

Sensor Reheat chart

FOOD	AMOUNT	PROCEDURE
(Initial temperature)		
Sensor Reheat		Place in dish or casserole slightly larger than amount to be reheated. Flatten, if possible. Cover with lid, plastic wrap or wax paper. Use covers such as plastic wrap or lids with larger quantities of more dense foods such as stews. After reheating, stir well, if possible. After stirring, re-cover and allow to stand 2 to 3 minutes. Foods should be very hot. If not, continue to heat with variable power and time.
1. Pasta (5 °C)	1 - 6 cups (8 - 24 oz)	Use this pad to reheat refrigerated canned or homemade pasta with sauce. For room temperature pastas, use Less option. Pasta without sauce double the quantity per setting. For example, measure 2 cups of cooked noodles and program for 1 cup. Cover with lid or plastic wrap. After cooking, stir and let stand, covered 2 to 3 minutes.
2. Soup (5 °C)	1 - 3 cups (8 - 24 oz)	Place in bowl or casserole. Cover with lid or plastic wrap. At end, stir, re-cover and let stand 1 to 3 minutes.
3. Dinner Plate (5 °C)	8 - 16 oz 225 - 450 g	Put dinner plate on a microwave safe plate . After heating, stir well.

CONVECTION COOKING

Convection Cooking

There are ten temperatures of convection: 100F, 200F, 250F, 300F, 325F, 350F, 375F, 400F, 425F, 450F.

Convection cooking uses a heating element to raise the temperature of the air inside the oven. Any oven temperature from 100°F to 450°F may be set. A fan gently circulates this heated air throughout the oven, over and around the food, producing golden brown exteriors and rich, moist interiors.

Because the heated air is kept constantly moving, not permitting a layer of cooler air to develop around the food, some foods cook faster than in regular oven cooking.

For Best Results...

Always use the round wire rack when convection cooking. Reduce package/recipe temperature 25°F for baked goods. The round wire rack is required for good air circulation and even browning.

See the *Cookware Tips* section (P21) for information on suggested cookware.

Using convection with preheating

- Suppose you want to cook food for 5 minutes at 250°F using convection with preheating

Step	Press
1. Press convection pad once.	convection
2. Press the temperature key to select the temperature you need. Do not enter cook time now. (The cook time will be entered later, after the oven is preheated.)	3
3. Press Start/+30SEC. pad to start preheating. (When the oven is preheated, it will signal.)	START enter +30 sec
4. Place the food in the oven. Press the number keys to set cooking time (If you do not enter the cooking time within 20 minutes the oven will turn off automatically)	5 0 0
5. press " Start/+30SEC. " to start cooking. When cooking is complete, the oven will signal and turn off.	START enter +30 sec

Using convection without preheating

- Suppose you want to cook food for 5 minutes at 250°F using convection without preheating

Step	Press
1. If your recipe does not require preheating, press the " convection " pad once.	convection

- Press the temperature key to select the temperature you need. **3**
- Press "**convection**" to confirm the temperature.
- Press the number keys to set cooking time. **5 0 0**
- Press the " **Start/+30SEC.** " pad to start the oven. **START enter +30 sec**

Combination Cooking

Combination Cooking offers the best features of microwave energy and convection cooking. Microwaves cook food fast and convection circulation of heated air browns foods beautifully.

For Best Results...

Always use the round wire rack when combination cooking. The round wire rack is required for good air circulation and even browning.

See the *Cookware Tips* section (P21) for information on suggested cookware.

Microwave+Convection Combination Cooking

- Suppose you want to cook food for 5 minutes using combination cooking.

Step	Press
1. Press convection +micro pad once.	convection +micro
2. Press the number keys to set cooking time.	5 0 0
3. Press Start/+30SEC. pad to start cooking.	START enter +30 sec

NOTES

- Check the *Cookware Tips* section for correct cookware when *Combination Cooking*
- Do not use metal cookware when *Combination Cooking*
- For best roasting and browning results, whole roasts should be cooked in a glass dish placed directly on the oven shelf.
- For foods that are too tall to fit in the oven, you may take out the round wire rack and place the dish directly on the turntable.

CONVECTION COOKING

Convection Cooking

- Use the round wire rack during convection baking.
- Always pre-heat the oven before convection baking.
- Avoid opening the oven door during cooking – each time the door is opened the oven loses heat and this can cause uneven baking.

Biscuits and bread

TYPE	TEMPERATURE	TIME	NOTES
Biscuits	400°F	20-30 minutes	Canned refrigerated biscuits take 2 to 4 minutes less time.
Muffins	350°F	15-20 minutes	Remove from tin straight away and place on cooling rack.
Nut bread or fruit bread	350°F	55-70 minutes	
Bread	350°F	55-65 minutes	
Plain or sweet rolls	350°F	40-50 minutes	Lightly grease baking sheet.

Cakes

TYPE	TEMPERATURE	TIME	NOTES
Cheesecake	350°F	65-75 minutes	After baking open oven door slightly and leave cheesecake to stand in oven for 30 minutes
Coffee cake	350°F	30-40 minutes	
Cup cakes	350°F	20-30 minutes	
Fruit cake	300°F	85-95 minutes	
Gingerbread	350°F	40-45 minutes	

CONVECTION COOKING

Combination Cooking

Combination cooking helps to brown and crisp foods.

TYPE	QUANTITY	TIME	NOTES
Beefburgers	4oz	16-19 minutes for two	Place on microwave-proof plate, drain fat and turn halfway through cooking.
Beef rump roast	1.0kg	Rare: 15-20 minutes Medium: 21-25 minutes Well done: 26-30 minutes	Place fat side down on low rack, season, shield if necessary After cooking, leave to stand for 15 minutes.
Lamb roast, rolled, boneless	1.0kg	Rare: 15-20 minutes Medium: 21-25 minutes Well done: 26-30 minutes	Place fat side down on low rack, brush with marinade and season, shield if necessary. After cooking, leave to stand for 15 minutes.
Pork	2 chops	Rare: 13-17 minutes Medium: 18-23 minutes Well done: 24-29 minutes	Place on high rack, brush with marinade and season. Cook until no longer pink or internal temperature reaches 170°F. Turn halfway through cooking. After cooking, cover with foil and leave to stand for 5 minutes.
Pork	4 chops	Rare: 15-19 minutes Medium: 20-25 minutes Well done: 26-32 minutes	Place on high rack, brush with marinade and season. Cook until no longer pink or internal temperature reaches 170°F. Turn halfway through cooking. After cooking, cover with foil and leave to stand for 5 minutes.
Pork loin roast, rolled, boneless	1.0kg	Rare: 20-25 minutes Medium: 26-30 minutes Well done: 30-35 minutes	Place fat side down on low rack, season, shield if necessary. After cooking, cover with foil and leave to stand for 15 minutes.
Chicken breasts	1 lb.	16-26 minutes	Wash and dry meat, remove skin, place thickest portion to outside on high rack.
Chicken boneless portions	1 lb.	13-24 minutes	Place on high rack, brush with butter and season as required. Turn halfway through cooking. Cook until no longer pink and juices run clear. After cooking, cover with foil and leave to stand for 3-5 minutes.
Chicken, whole	1.3kg	25-40 minutes	Wash and dry bird, place breast down on low rack, brush with butter and season as required. Turn and drain halfway through cooking. Cook until no longer pink and juices run clear. After cooking, cover with foil and leave to stand for 10 minutes. Temperature in thigh should be approx 185°F.

CONVECTION COOKING

Cookware Tips

Convection Cooking

Metal Pans are recommended for all types of baked products, but especially where browning or crusting is important.

Dark or dull finish metal pans are best for breads and pies because they absorb heat and produce crisper crust.

Shiny aluminum pans are better for cakes, cookies or muffins because these pans reflect heat and help produce a light tender crust.

Glass or Glass-Ceramic casserole or baking dishes are best suited for egg and cheese recipes due to the cleanability of glass.

Combination Cooking

Glass or Glass-Ceramic baking containers are recommended. Be sure not to use items with metal trim as it may cause arcing (sparking) with oven wall or oven shelf, damaging the cookware, the shelf or the oven.

Heat-Resistant Plastic microwave cookware (safe to 450°F) may be used, but it is not recommended for foods requiring crusting or all-around browning, because the plastic is a poor conductor of heat.

COOKWARE	MICROWAVE	CONVECTION	COMBINATION
Heat-Resistant Glass, Glass-Ceramic (Pyrex®, Fire King®, Corning Ware®, etc.)	Yes	Yes	Yes
Metal	No	Yes	No
Non Heat-Resistant Glass	No	No	No
Microwave-Safe Plastics	Yes	No	Yes
Plastic Films and Wraps	Yes	No	No
Paper Products	Yes	No	No
Straw, Wicker and Wood	Yes	No	No

*Use only microwave cookware that is safe to 450 °F.

CONVECTION COOKING

Select the best method of cooking

Use the following guide to select the best method of cooking. Specific recipes can be adapted to any method of cooking.

①—Best method
②—Alternate method
N/R—Not recommended

FOODS	MICROWAVE	COMBINATION	CONVECTION
Appetizers			
Dips and Spreads	①	N/R	N/R
Pastry Snacks	②	①	②
Beverages	①	N/R	N/R
Sauces and Toppings	①	N/R	N/R
Soups and Stews	①	②	N/R
Meats			
Defrosting	①	N/R	N/R
Roasting	②	①	②
Poultry			
Defrosting	①	N/R	N/R
Roasting	②	①	②
Fish and Seafood			
Defrosting	①	N/R	N/R
Cooking	①	②	N/R
Casseroles	②	①	②
Eggs and Cheese			
Scrambled, Omelets	①	N/R	②
Quiche, Souffle	②	②	①
Vegetables , (fresh)	①	N/R	N/R
Breads			
Quick	②	①	②
Yeast	N/R	②	①
Muffins, Coffee Cake	②	①	②
Desserts			
Cakes, Layer and Bundt	②	①	②
Angel Food and Chiffon	N/R	N/R	①
Custard and Pudding	①	N/R	N/R
Bar Cookies	②	①	②
Fruit	①	N/R	N/R
Pies and Pastry	N/R	②	①
Candy	①	N/R	N/R
Blanching Vegetables	①	N/R	N/R
Frozen Convenience Foods	①	②	②

CONVENIENT FEATURES

User Pref

User Pref provides 4 features that make using your oven easy because specific instructions are provided in the interactive display.

User Pref Label

user pref
1 Clock
2 Child Lock
3 Auto Start
4 Buzzer On/ Off

1. Set the Clock

See page 10.

2. Child Lock

The Child Lock prevents unwanted oven operation such as by small children. The oven can be set so that the control panel is deactivated or locked. To set, press the **user pref** pad, the number 2 and then press the **START enter +30 sec** pad. If a pad be pressed, *LOCK ON* will appear in the display.

To cancel, press the **user pref** pad and the **START enter +30 sec** pad. Child Lock will not be canceled if other pads except the **START enter +30 sec** pad are pressed after pressing the **user pref** pad.

3. Auto Start

If you wish to program your oven to begin cooking automatically at a designated time of day, follow this procedure:

- Suppose you want to start cooking a stew for 20 minutes at 50% power level at 4:30. Before setting, check to make sure the clock is showing the correct time of day.

Step	Press
1. Press the user pref pad.	user pref
2. Press number 3.	3
3. Enter the start time. Ex : 4:30	4 3 0
4. Press the START enter +30 sec pad.	START enter +30 sec

Step	Press
5. Enter cooking time. Ex : 20 minutes	2 0 0 0
6. Press the power level pad six times for 50% power.	power level x 6
7. Press the START enter +30 sec pad.	START enter +30 sec



NOTES

- If the door is closed, buzzer will ring twice when the pre-set time arrives, then cooking will start automatically.
- Auto Start can be used for manual cooking in conjunction with sequence cooking if clock is set.
- Be sure to choose foods that can be left in the oven safely until the Auto Start time. Acorn or butternut squash are often a good choice.
- If the electrical power supply to your microwave oven should be interrupted, reset the clock (see page 10) and follow the procedure above to set Auto Start.

4. Audible Signal Elimination

If you wish to have the oven operate with no audible signals, press the **user pref** pad, number 4 and the **START** pad.

To cancel and restore the audible signal, press the **user pref** pad, number 4 and the **START enter +30 sec** pad.

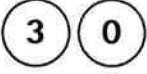
CONVENIENT FEATURES

Multiple Sequence Cooking

Your oven can be programmed for up to 2 automatic cooking sequences, switching from one power level setting to another automatically.

Sometimes cooking directions tell you to start on one power level and then change to a different power level. Your oven can do this automatically.

- Suppose you want to cook roast beef for 5 minutes at 100% and then continue to cook for 30 minutes at 50%.

Step	Press
1. Enter cooking time for 1st stage.	
2. Press the power level pad once for 100% power for 1st stage.	
3. Enter second cooking time for 2nd stage.	 
4. Press the power level pad 6 times for 50% power for 2nd stage.	
5. Press the START enter +30 sec pad for 2nd stage.	

- Suppose you want to heat a cup of soup for 30 seconds.

Step	Press
Press the START enter +30 sec pad.	

NOTES

1. To use **+30 sec**, press the pad after cooking, closing the door, pressing the **STOP clear** pad or during cooking.
2. +30 seconds cannot be used with SENSOR COOKING and Chicken Nuggets.

Quick Start

Quick start is very useful function to start to cook from 1 minute to 6 minutes by pressing number from 1 to 6 by pressing the **START enter +30 sec** pad.

- Suppose you want to cook 2 minutes at 100% power.

Step	Press
Press number 2.	

NOTE

If 100% is selected as the final sequence, it is not necessary to press the **power level** pad.

+30 Seconds

+30 seconds allows you to cook for 30 seconds at 100% by simply pressing the **START enter +30 sec** pad. You can also extend cooking time in multiples of 30 seconds by repeatedly pressing the **START enter +30 sec** pad until maximum 99 minutes 99 seconds during manual cooking.

CONVENIENT FEATURES

Timer

- Suppose you want to time a 3-minute long distance phone call.

Step	Press
1. Press the timer on-off pad.	
2. Enter time.	
3. Press the timer on-off pad. The timer will count down.	

NOTES

- Timer** operates as a kitchen timer and cannot be used when the oven is operating.
- To cancel the timer, press the **STOP clear** pad once.

Demonstration Mode

When the oven is electrified and within one minute, to demonstrate, press the **popcorn** pad and hold for 6 seconds. *ENTER DEMO* will appear in the display. Cooking operations and specific special features can now be demonstrated with no power in the oven.

For example, press the **popcorn** pad and the display will show 3:28 and count down quickly to *END*.

To cancel, press the **popcorn** pad and hold for 6 seconds. If easier, unplug the oven from the electrical outlet and replug.

Light

Press the **light on/off** pad once for on, twice for off.

Fan

The fan will automatically start when heat rises from range surface units or burners. This protects the Over the Range Microwave Oven from excessive temperature rise. The fan will stay on until the temperature decreases. It cannot be turned off manually during this time.

For other uses, press the **vent hi/lo/off** pad once for high speed, twice for low speed and three times to turn off.

CLEANING AND CARE

**Disconnect the power cord before cleaning or
leave the door open to deactivate the oven during cleaning.**

EXTERIOR

The outside surface is precoated steel and plastic. Clean the outside with mild soap and water; rinse and dry with a soft cloth. Do not use any type of household or abrasive cleaner.

DOOR

Wipe the window on both sides with a soft cloth to remove any spills or spatters. Metal parts will be easier to maintain if wiped frequently with a soft cloth. Avoid the use of spray and other harsh cleaners as they may stain, streak or dull the door surface.

EASY CARE™ STAINLESS STEEL (SOME MODELS)

Your microwave oven finish may be made with Easy Care™ Stainless Steel (some models). Clean the stainless with warm soapy water using a clean sponge or cloth. Rinse with clean water and dry with a soft clean cloth. DO NOT use ANY store bought cleaners like Stainless Steel cleaners or any other types of cleaners containing any abrasive, chlorides, chlorines or ammonia. It is recommended to use mild dish soap and water or a 50/50 solution of water and vinegar.

TOUCH CONTROL PANEL

Care should be taken in cleaning the touch control panel. If the control panel becomes soiled, open the microwave oven door before cleaning. Wipe the panel with a cloth dampened slightly with water only. Dry with a soft cloth. Do not scrub or use any sort of chemical cleaners. Close door and touch **Clear/Off**.

INTERIOR

Cleaning is easy because little heat is generated to the interior surfaces. To clean the interior surfaces, wipe with a soft cloth and warm water. DO NOT USE ABRASIVE OR HARSH CLEANERS OR SCOURING PADS. For heavier soil, use baking soda or a mild soap; rinse thoroughly with hot water. The round wire rack and shelf can be cleaned with hot soapy water, rinsed and dried.

WAVEGUIDE COVER

The waveguide cover is located on the ceiling in the microwave oven cavity. It is made from mica so requires special care. Keep the waveguide cover clean to assure good microwave oven performance. Carefully wipe with a damp cloth any food spatters from the surface of the cover immediately after they occur. Built-up splashes may

overheat and cause smoke or possibly catch fire. DO NOT REMOVE THE WAVEGUIDE COVER.

ODOR REMOVAL

Occasionally, a cooking odor may remain in the microwave oven. To remove, combine 1 cup water, grated peel and juice of 1 lemon and several whole cloves in a 2-cup glass measuring cup. Boil for several minutes using 100% power. Allow to set in microwave oven until cool. Wipe interior with a soft cloth.

TURNTABLE/TURNTABLE SUPPORT

The turntable and turntable support can be removed for easy cleaning. Wash them in mild, sudsy water; for stubborn stains use a mild cleanser and non-abrasive scouring sponge. They are also dishwasher-proof. Use upper round wirerack of dishwasher. The turntable motor shaft is not sealed, so excess water or spills should be wiped up immediately.

CLEANING AND CARE

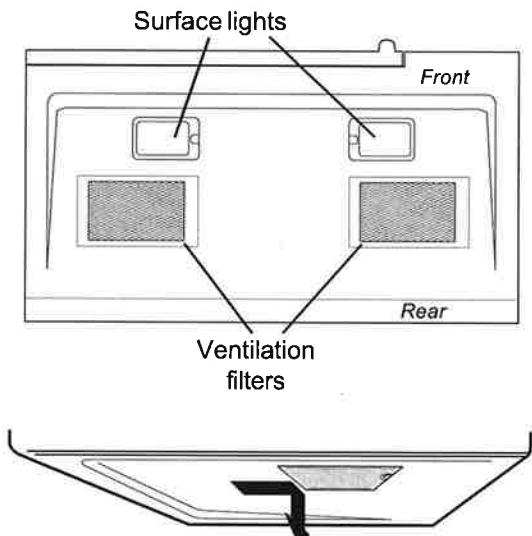
Disconnect the power cord before cleaning or
leave the door open to deactivate the oven during cleaning.

Cleaning the exhaust filters

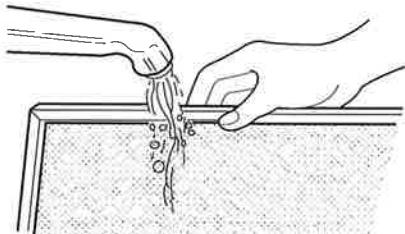
The oven ventilation exhaust filters should be removed and cleaned often; generally at least once every month.

CAUTION

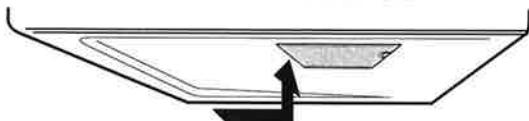
To avoid risk of personal injury or property damage, do not operate oven hood without filters properly in place.



1. To remove the exhaust ventilation filters, slide the filter to the rear. Then pull filter downward and push to the other side. The filter will drop out. Repeat for the 2nd filter.



2. Soak the ventilation filters in hot water using a mild detergent. Rinse well and shake to dry or wash in a dishwasher. **Do not use ammonia. The aluminum on the filter will corrode and darken.**



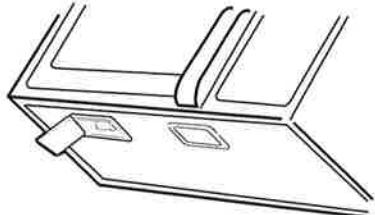
3. To reinstall the exhaust ventilation filter, slide it into the side slot, then push up and toward oven to lock. Reinstall the 2nd filter using the same procedure.

Surface light replacement

CAUTION

To avoid risk of personal injury or property damage, wear gloves when replacing the light bulbs.

1. Unplug the microwave oven or turn off power at the main circuit breaker.
2. Remove the bulb cover mounting screws at both light positions under the microwave.



3. Replace bulb with 30 watt appliance bulb.
4. Re-install bulb cover and mounting screw.
5. Plug the microwave back into the power supply or turn the power back on at the main circuit breaker.

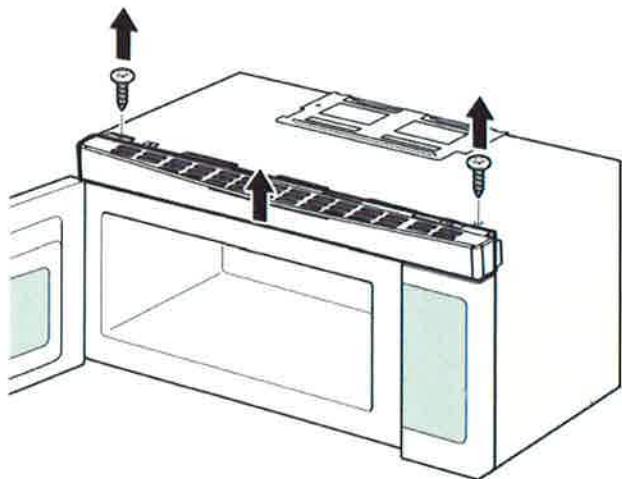
CLEANING AND CARE

Disconnect the power cord before cleaning or
leave the door open to deactivate the oven during cleaning.

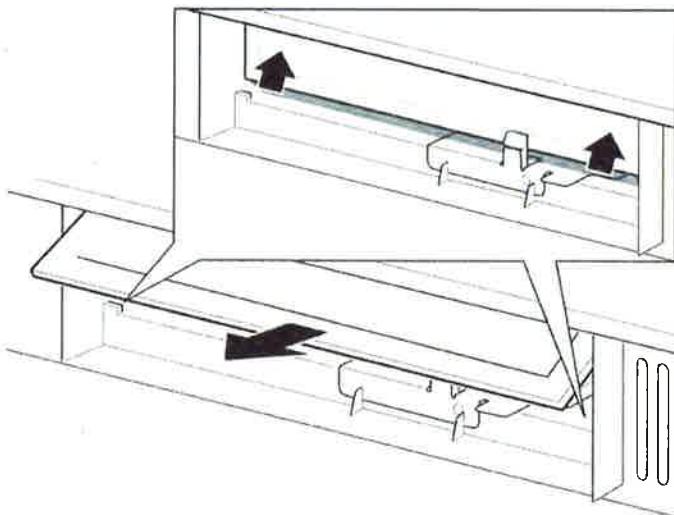
Charcoal filter replacement

Charcoal Filter installed in your microwave oven, is used for nonvented, recirculated installation. The filter should be changed every 6 to 12 months depending on use.

1. Disconnect power to the microwave oven at the circuit breaker panel or by unplugging.
2. Remove the vent grill mounting screws.
3. Pull the vent grill away from the unit.



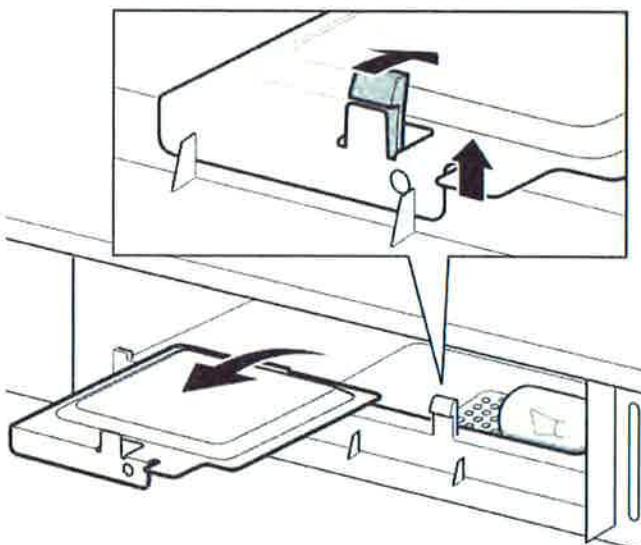
4. Remove the charcoal filter by pushing it inwards, then turn and pull it away from the unit.



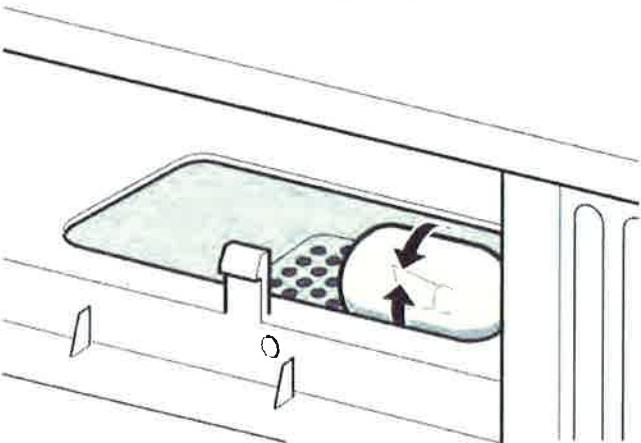
Oven light replacement

Remove the vent grill per instructions 1-4 above and charcoal filter, if used.

1. Open light cover located behind filter mounting by carefully pulling up on the front edge.



2. Remove old light bulb and replace only with equivalent 30 watt bulb available from parts distributor. Bulbs are also available at most hardware stores or lighting centers.



Note: DO NOT USE BULB LARGER THAN 30 WATTS.

3. Replace the microwave oven light cover by carefully pushing into place. Replace the charcoal filter. Push the vent grill back into place (engaging both the bottom and top tabs) and replace the vent grill mounting screws.

CLEANING AND CARE

**Disconnect the power cord before cleaning or
leave the door open to deactivate the oven during cleaning.**

Cleaning suggestions

For best performance and for safety reasons, keep the oven clean inside and outside. Take special care to keep the inner door panel and oven front frame free of food and grease build-up.

Never use rough scouring powder or pads on the microwave. Wipe the microwave oven inside and out with a soft cloth and warm (not hot) mild detergent solution. Then rinse and wipe completely dry.

Wipe spatters immediately with a wet paper towel, especially after cooking greasy foods like chicken or bacon.

Clean your microwave oven weekly or more often, if needed.

Follow these instructions to clean and care for your microwave oven:

- Keep the inside (cavity) of the oven clean. Food particles and spilled liquids can stick to the oven walls, causing the oven to work less efficiently.
- Wipe up spills immediately. Use a damp, clean cloth and mild soap. **DO NOT** use harsh detergents or abrasive cleaners.
- To help loosen baked-on food particles or liquids, heat 2 cups of water (add the juice of 1 lemon if you desire to keep the oven fresh smelling) in a 4 cup measuring glass at High power for 5 minutes or until boiling. Let stand in oven cavity for 1 or 2 minutes.
- Remove the glass turntable tray from the oven when cleaning the oven cavity or tray. To prevent the glass turntable from breaking, handle with care and do not put it in water immediately after cooking. Wash the turntable tray in warm sudsy water or in the dishwasher.
- Clean the outside surface of the microwave with soap and a clean damp cloth. Dry with a clean soft cloth. To prevent damage to the operating parts of the oven, do not let water seep into any vents or openings.
- Wash the oven door window with very mild soap and water. Be sure to use a soft clean cloth to avoid scratching.

- If steam accumulates inside or outside the oven door, wipe with a soft cloth. Steam can accumulate when operating the oven in high humidity and in no way indicates microwave leakage.
- Never operate the oven without food in the oven cavity; this can damage the magnetron tube or glass tray. You may wish to leave a cup of water standing inside the oven when it is not in use to prevent damage if the oven is accidentally turned on.

How to Clean the Inside

Walls, Floor, Inside Window, Metal and Plastic Parts on the Door.

Some spatters can be removed with a paper towel, others may require a damp cloth. Remove greasy spatters with a sudsy cloth, then rinse with a damp cloth. Do not use abrasive cleaners or sharp utensils on oven walls.

To clean the surface of the door and the surface of the oven that come together upon closing, use only mild, non-abrasive soaps or detergents using a sponge or soft cloth. Rinse with a damp cloth and dry.

Never use a commercial oven cleaner on any part of your microwave.

Removable Turntable and Turntable Support

To prevent breakage, do not place the turntable into water just after cooking. Wash it carefully in warm, sudsy water or in the dishwasher. The turntable and support can be broken if dropped. Remember, do not operate the oven without the turntable and support in place.

How to Clean the Outside

Do not use cleaners containing ammonia or alcohol on the microwave oven. Ammonia or alcohol can damage the appearance of the microwave.

Case

Clean the outside of the microwave with a sudsy cloth. Rinse with a damp cloth and then dry. Wipe the window clean with a damp cloth.

CLEANING AND CARE

**Disconnect the power cord before cleaning or
leave the door open to deactivate the oven during cleaning.**

Control Panel and Door

Wipe with a damp cloth. Dry thoroughly. Do not use cleaning sprays, large amounts of soap and water, abrasives or sharp objects on the panel—they can damage it. Some paper towels can also scratch the control panel.

Door Surface

It is important to keep the area clean where the door seals against the microwave. Use only mild, non-abrasive detergents applied with a clean sponge or soft cloth. Rinse well.

Power Cord

If the cord becomes soiled, unplug and wash with a damp cloth. For stubborn spots, sudsy water may be used, but be certain to rinse with a damp cloth and dry thoroughly before plugging cord into outlet.

Stainless Steel

Do not use a steel-wool pad; it will scratch the surface.

To clean stainless steel surfaces, use a hot, damp cloth with a mild detergent suitable for stainless steel surfaces. Use a clean, hot, damp cloth to remove soap. Dry with a dry, clean cloth.

If food soil remains, try a general kitchen cleaner, such as Fantastik®, Simple Green® or Formula 409®.

For hard-to-clean soil, use a standard stainless-steel cleaner, such as Bon-Ami® or Cameo®.

Apply cleaner with a damp sponge. Use a clean, hot, damp cloth to remove cleaner. Dry with a dry, clean cloth. Always scrub lightly in the direction of the grain.

After cleaning, use a stainless-steel polish, such as stainless Steel Magic®, Revere Copper and Stainless Steel Cleaner® or Wenol All Purpose Metal Polish®. Follow the product instructions for cleaning the stainless-steel surface.

SERVICE CALL CHECK

Please check the following before calling for service:

Place one cup of water in a glass measuring cup in the microwave oven and close the door securely.
Operate the microwave oven for one minute at HIGH 100%.

- | | | |
|--|-----------|----------|
| A Does the microwave oven light come on? | YES _____ | NO _____ |
| B Does the cooling fan work? (Put your hand at top above Display.) | YES _____ | NO _____ |
| C Does the turntable rotate? (It is normal for the turntable to turn in either direction.) | YES _____ | NO _____ |
| D Is the water in the microwave oven warm? | YES _____ | NO _____ |

If "NO" is the answer to any of the above questions,
please check electrical outlet, fuse and/or circuit
breaker. If they are functioning properly, CONTACT
YOUR NEAREST ELECTROLUX AUTHORIZED SER-
VICER.

A microwave oven should never be serviced by a
"do-it-yourself" repair person.

NOTES

1. If time appearing in the display is counting down very rapidly, check Demonstration Mode on page 25 and cancel.
2. If the oven is set for more than 40 minutes at 80, 90 or 100 percent power level, after the first 40 minutes the power level will automatically adjust itself to 70 percent power to avoid overcooking.

SPECIFICATIONS

AC Line Voltage:	Single phase 120V, 60Hz, AC only
AC Power Required:	1500W 13.5 A (for FGMV154CLF, FGMV153CLB/W CGMV154CLF,CGMV153CLB/W)
Output Power*:	900 W
Output Power*(convection):	1450 W
Frequency:	2450 MHz (Class B/Group2)**
Outside Dimensions (including handle):	29.88 "(W) x 15.75 "(H) x 15.04 "(D)
Cavity Dimensions:	20.24 "(W) x 8.94 "(H) x 13.94 "(D)
Microwave oven Capacity***:	1.5 Cu.Ft.
Cooking Uniformity:	Turntable
Weight:	Approx. (net) 63.93 lb, (gross) 69.45 lb
Work/Night Light:	2 bulbs 30w each (incandescent light bulbs)
Oven Light:	1 bulb 30w (incandescent light bulbs)

* The International Electrotechnical Commission's standardized method for measuring output wattage. This test method is widely recognized.

** This is the classification of ISM (Industrial, Scientific and Medical) equipment described in the International Standard CISPR11.

*** Internal capacity is calculated by measuring maximum width, depth and height. Actual capacity for holding food is less. In compliance with standards set by:

FCC - Federal Communications Commission Authorized.

DHHS - Complies with Department of Health and Human Services (DHHS) rule, CFR, Title 21, Chapter I, Subchapter J.



- This symbol on the nameplate means the product is listed by Underwriters Laboratories, Inc.



- This symbol on the nameplate means the product is listed by Underwriters Laboratories, Inc. for use in Canada.

MAJOR APPLIANCE WARRANTY INFORMATION

Your appliance is covered by a one year limited warranty. For one year from your original date of purchase, Electrolux will pay all costs for repairing or replacing any parts of this appliance that prove to be defective in materials or workmanship when such appliance is installed, used and maintained in accordance with the provided instructions.

Exclusions This warranty does not cover the following:

1. Products with original serial numbers that have been removed, altered or cannot be readily determined.
2. Product that has been transferred from its original owner to another party or removed outside the USA or Canada.
3. Rust on the interior or exterior of the unit.
4. Products purchased "as-is" are not covered by this warranty.
5. Food loss due to any refrigerator or freezer failures.
6. Products used in a commercial setting.
7. Service calls which do not involve malfunction or defects in materials or workmanship, or for appliances not in ordinary household use or used other than in accordance with the provided instructions.
8. Service calls to correct the installation of your appliance or to instruct you how to use your appliance.
9. Expenses for making the appliance accessible for servicing, such as removal of trim, cupboards, shelves, etc., which are not a part of the appliance when it is shipped from the factory.
10. Service calls to repair or replace appliance light bulbs, air filters, water filters, other consumables, or knobs, handles, or other cosmetic parts.
11. Surcharges including, but not limited to, any after hour, weekend, or holiday service calls, tolls, ferry trip charges, or mileage expense for service calls to remote areas, including the state of Alaska.
12. Damages to the finish of appliance or home incurred during installation, including but not limited to floors, cabinets, walls, etc.
13. Damages caused by: services performed by unauthorized service companies; use of parts other than genuine Electrolux parts or parts obtained from persons other than authorized service companies; or external causes such as abuse, misuse, inadequate power supply, accidents, fires, or acts of God.

DISCLAIMER OF IMPLIED WARRANTIES; LIMITATION OF REMEDIES

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If You Need Service Keep your receipt, delivery slip, or some other appropriate payment record to establish the warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. Service under this warranty must be obtained by contacting Electrolux at the addresses or phone numbers below.

This warranty only applies in the USA and Canada. In the USA, your appliance is warranted by Electrolux Major Appliances North America, a division of Electrolux Home Products, Inc. In Canada, your appliance is warranted by Electrolux Canada Corp. Electrolux authorizes no person to change or add to any obligations under this warranty. Obligations for service and parts under this warranty must be performed by Electrolux or an authorized service company. Product features or specifications as described or illustrated are subject to change without notice.

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